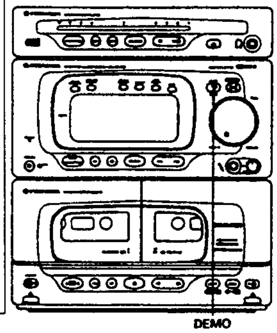
PIONEER®

The Art of Entertainment

Service Manual



ORDER NO.
RRV1222

STEREO CD CASSETTE DECK RECEIVER

XR-P350

XR-P250

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	The voltage can be converted by the following method.
	XR−P350	XR−P250		
MEXK/EA	○	○	AC220−230V	——
MEXK/EB	○	○	AC220−230V	——
MEZIXK/DI	○	○	AC220−230V	——
NBXK	○	○	AC230V	——
SD	○	—	AC110−115V/120−127V/220−230V/240V	With the voltage selector
S/DF	○	—	AC110−115V/120−127V/220−230V/240V	With the voltage selector
SL	○	—	AC110−115V/120V/220−230V/240V	With the voltage selector
YPW	○	—	AC240V	——

- **For the following: XR−P350/MEXK/EB, MEZIXK/DI, NBXK, SD, S/DF, SL and YPW; XR−P250/MEXK/EA, MEXK/EB, MEZIXK/DI and NBXK, refer to page 104.**

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVISE INC. P.O. Box 1760, Long Beach, California 90801, U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2, Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia, TEL: [03] 580-9911

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1. SAFETY INFORMATION

(FOR EUROPEAN MODEL ONLY)

VARO !
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING !
OSYNLIG LASERSTRALNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRALEN.

LASER
Kuva 1
Lasersateilyn
varoitusmerkki

WARNING !
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

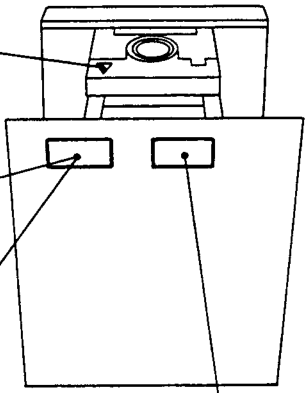
IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780 - 785 nm

LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK

MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI, SL and YPW types



CLASS 1
LASER PRODUCT
ARW1046

MEXK/EA, MEXK/EB, NBXK, and MEZIXK/DI types

CLASS 1
LASER PRODUCT
VRW-328

SL and YPW types

Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S601) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S601) is not on CLMP terminal side (CLMP signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S601) is deliberately set to CLMP terminal side. (low level)
   The interlock also does not function in the test mode*. Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class **1** laser beam.

'92S1.B

* Refer to page 89.

ADVARSEL
USYNLIG LASERTRÅLING VED ÅBNING NAR SIKKERHED SAF-BRYDERE ER UDE AF FUNKTION. UNDGA UDSÆTTELSE FOR STRALING.

VARO !
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

VORSICHT !
UNSICHTBARE LASER-STRAHLUNG TRITT AUS. WENN DECKEL(ODER KLAPPE)GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!

VARNING !
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

ARW1047

MEXK/EA and MEXK/EB types

ADVARSEL
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAF-BRYDERE ER UDE AF FUNKTION.
UNDGÅ UDSÆTTELSE FOR STRÅLING.
VORSICHT!
UNSICHTBARE LASER-STRAHLUNG TRITT AUS. WENN DECKEL (ODER KLAPPE)GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
ARW1049

ADVARSEL!
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAF-BRYDERE ER UDE AF FUNKTION.
UNDGÅ UDESÆTTELSE FOR STRÅLING.
VORSICHT!
UNSCHITBARE LASER-STRAHLUNG TRITT AUS. WENN DECKEL (ODER KLAPPE) GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
VRW1094

MEZIXK/DI type

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM
ARW1050

NBXK type

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM
PRW1018

SL and YPW types

2. SPECIFICATIONS

STEREO CD CASSETTE DECK RECEIVER

Amplifier Section

<XR-P350 / XR-P250>

[FRONT]

Continuous Power Output (DIN)	36 W + 36 W (1 kHz, T.H.D. 1 %, 8 Ω)
Continuous Power Output (DIN MUSIC)	100 W + 100 W

- *Above specifications are for when power supply is 230 V.*

FM/AM Tuner Section

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	
With 9 kHz step	531 kHz to 1,602 kHz
Antenna	Loop antenna

Miscellaneous

Power Requirements	230 V AC, 50/60 Hz (UK model) AC 220 - 230 V AC, 50/60 Hz (European model)
Power Consumption	
XR-P350	270 W
XR-P250	230 W

CD Section

Type	Compact disc digital audio system
Wow and Flutter	Limit of measurement (± 0.001 % W.PEAK) or less (EIAJ)

Cassette Deck Section

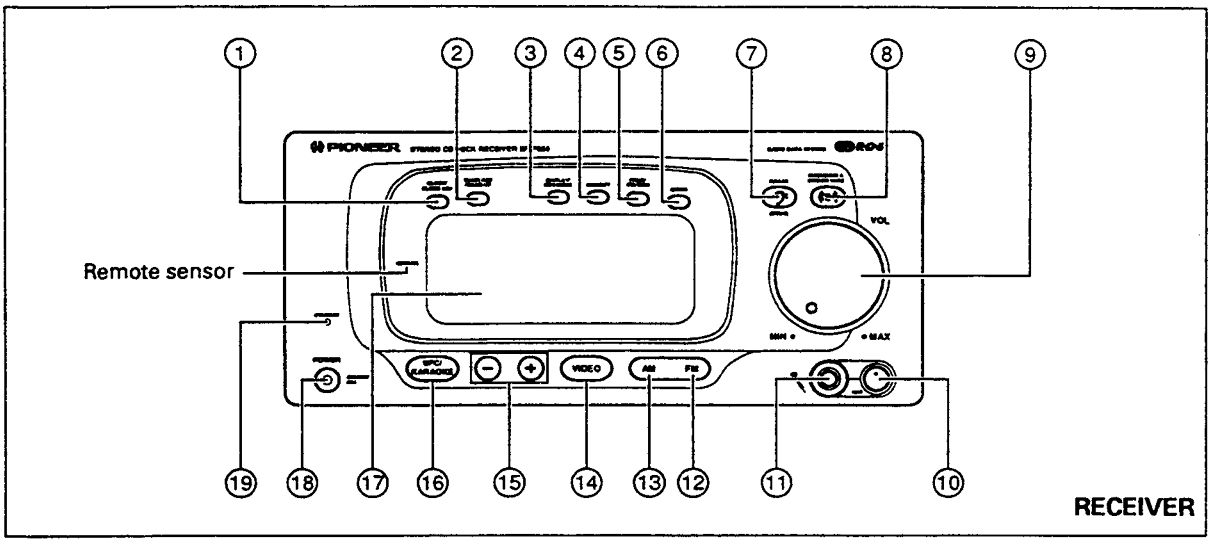
Systems	4 track, 2-channel stereo
Heads	Recording/playback head x 1 Playback head x 1 Erasing head x 1
Motor	DC servo motor x 1
Tape Type	TYPE I (Normal) tape/TYPE II (HIGH/CrO2) tape
Dimensions	240 (W) x 270 (H) x 342 (D) mm
Weight (without package)	7.1 kg

Accessories

Operating Instructions	1
Remote Control Unit	1
FM T-type Antenna	1
AM Loop Antenna	1
Size AAA/R03 Dry Cell Batteries	2
Speaker Cords (included with speaker systems)	2

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

3. PANEL FACILITIES



RECEIVER

① CLOCK/CLOCK ADJ button

② TIMER REC/WAKE-UP button

③ DISPLAY/RDS MODE button (XR-P350)
DISPLAY button (XR-P250)

④ MEMORY button

⑤ FREQ/STATION button
Each time this button is pressed, the mode changes between FREQUENCY and STATION.

⑥ MONO button

⑦ P.BASS (DEMO) button
Each time this button is pressed, the mode changes in the following sequence:

→ P.BASS 1 → P.BASS 2
off ←

⑧ SURROUND & STEREO WIDE button (XR-P350)
STEREO WIDE button (XR-P250)
Each time this button is pressed, the mode changes in the following sequence:

→ STWIDE 1 → STWIDE 2
off ←

⑨ Volume control (VOL)

⑩ Mic level control (XR-P350 only)

⑪ Microphone jack (XR-P350 only)

⑫ FM button

⑬ AM button

⑭ VIDEO button

⑮ Tuning/station call (⊖, ⊕) buttons

⑯ SFC/KARAOKE button (XR-P350)
SFC button (XR-P250)
Each time this button is pressed, the mode changes in the following sequence:
(XR-P350)

→ DISCO → HALL → MOVIE
off ← KARAOKE ←

(XR-P250)

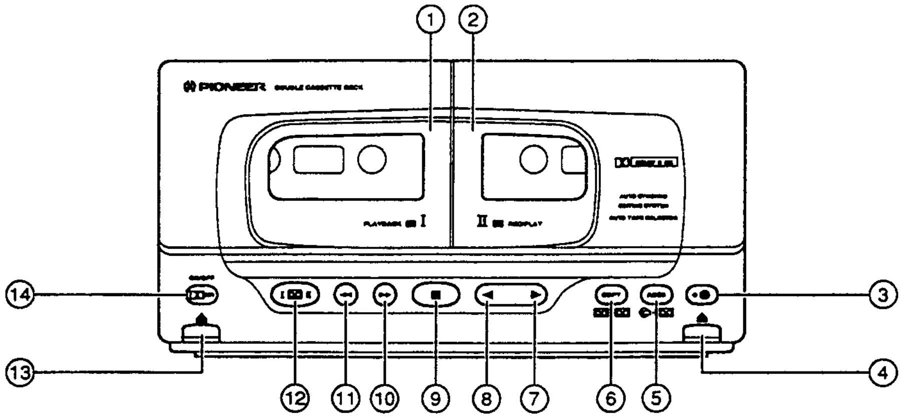
→ DISCO → HALL → MOVIE
off ←

⑰ Display

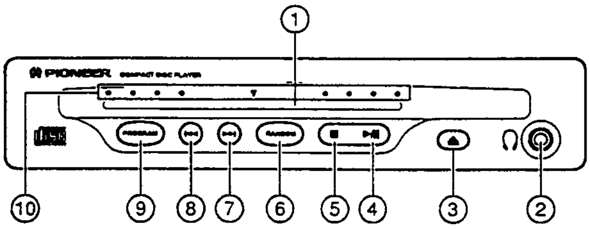
⑱ POWER STANDBY/ON switch

⑲ STANDBY indicator
This is the switch for electric power.

ON	: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY	: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)



TAPE DECK



CD PLAYER

TAPE DECK

① **TAPE I cassette door**
② **TAPE II cassette door**
③ **Rec standby button (●)**
④ **TAPE II Eject button (⏏)**
⑤ **ASES (Auto Synchro Editing System) button**
⑥ **COPY button**
⑦ **Forward play button (▶)**
⑧ **Reverse play button (◀)**
⑨ **Stop button (■)**
⑩ **Fast forward button (▶▶)**
⑪ **Rewind button (◀◀)**
⑫ **TAPE I/II selector button**
⑬ **TAPE I Eject button (⏏)**
⑭ **DD(DOLBY*) NR ON/OFF button**

Each time this button is pressed, DOLBY NR system turns ON and OFF.

*

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

CD PLAYER

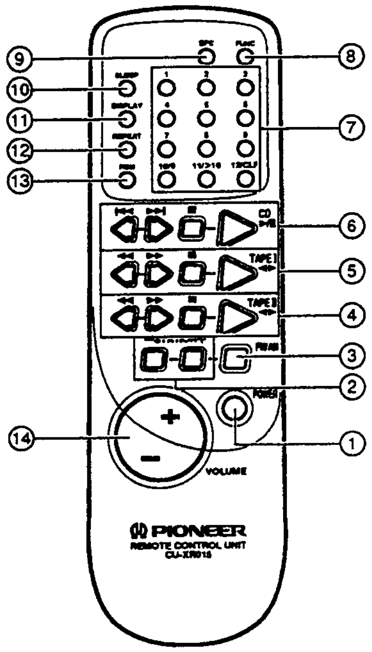
① **Disc insert position**
② **Headphones jack**
③ **Eject button (⏏)**
④ **Play/Pause button (▶/II)**
⑤ **Stop button (■)**
⑥ **RANDOM button**
⑦ **Forward Manual/Track search button (▶▶|)**
⑧ **Reverse Manual/Track search button (|◀◀)**
⑨ **PROGRAM button**
⑩ **Disc indicator**

■ Auto Function

This model is equipped with "Auto Function" operation, so when the switch for PLAY/PAUSE, RANDOM, PLAY(tape), or FM and AM (AM/FM with remote control unit) is pressed, the function switches automatically. Use the FUNC button on the remote control unit to select the component connected to the VIDEO/AUX IN jacks, since Auto Function is not effective for this.

NOTE:
The function cannot be switched during recording and tape copying.

REMOTE CONTROL UNIT



REMOTE CONTROL UNIT

① POWER button

② STATION – (down), + (up) buttons

Before operation, memorize broadcast stations with the STATION CALL buttons.

+ .... Stations change in order in the upward direction.

– .... Stations change in order in the downward direction.

③ FM/AM band button

④ TAPE II operation buttons

▷ : Playback

Each time this button is pressed, the mode changes between forward and reverse playback.

□ : STOP (Stops tape transport)

▷▷ : FF (Fast forward)

◁◁ : REW (Rewinds the tape)

⑤ TAPE I operation buttons

▷ : Playback

Each time this button is pressed, the mode changes between forward and reverse playback.

□ : STOP (Stops tape transport)

▷▷ : FF (Fast forward)

◁◁ : REW (Rewinds the tape)

⑥ CD operation buttons

▷ : Playback/Pause

Each time this button is pressed, the mode changes between playback and pause.

□ : STOP

◁◁ ▷▷ : Track search

⑦ Number buttons

These buttons are used for selecting track numbers of a CD and for scanning preset stations.

⑧ FUNC button

Each time this button is pressed, the function changes in the following sequence:

→ TUNER → TAPE → CD
VIDEO ←

⑨ SFC (SOUND FIELD CONTROL) button

Each time this button is pressed, the mode changes in the following sequence:

→ DISCO → HALL → MOVIE
off ←

⑩ SLEEP button

Each time this button is pressed, the setting changes in the following sequence:

→ SLEEP AUTO → SLEEP 90 → SLEEP 60
SLEEP off ← SLEEP 30 ←

⑪ DISPLAY button

⑫ REPEAT button

⑬ PGM (PROGRAM) button

⑭ VOLUME + (up), – (down) buttons

Increases/decreases the sound volume of the unit.

4. DISASSEMBLY

■ CD SLOT-IN MECHANISM

1. Remove the two screws ① from the rear panel side and the two screws ② from the front panel side.
2. Remove the VOLUME knob and the screw ③. (Refer to Fig. 2)
   (Please be careful as the STA. lens is in the VOLUME knob.)
3. Lift frame L and frame R from the rear panel side and remove them.
   When removal is difficult, lightly push the rear panel and/or the front panel to the outside for the removal.

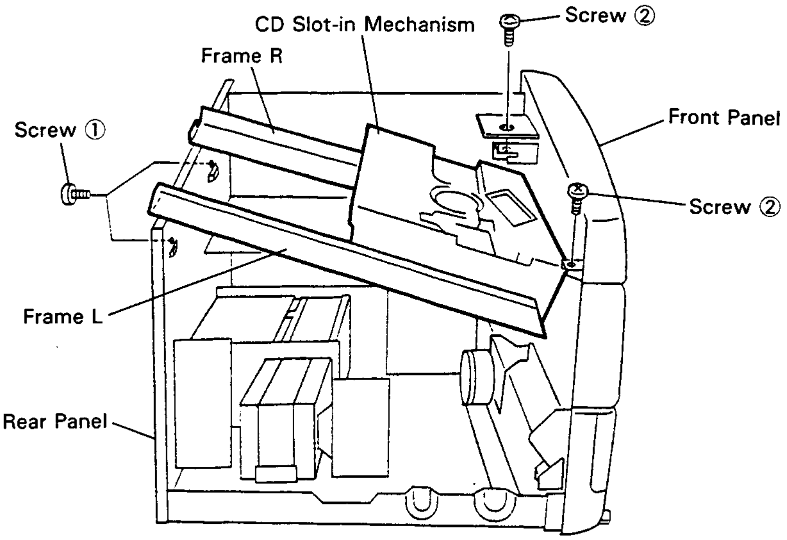

CD Slot-in Mechanism
Screw ②
Frame R
Screw ①
Front Panel
Screw ②
Frame L
Rear Panel

Fig. 1 Remove the CD Slot-in Mechanism

■ FRONT PANEL

1. Remove the CD slot-in mechanism.
2. Remove the two screws ① and the screw ②. (Refer to Fig. 2)
3. Pull the front panel quietly to the front to remove it.

■ POWER AMP MODULE

1. Remove the CD solt-in mechanism.
2. Remove the screw ④ and remove the four screws ⑤ from the rear panel side.
3. Pull out the power module while turning it to the front (transformer side).

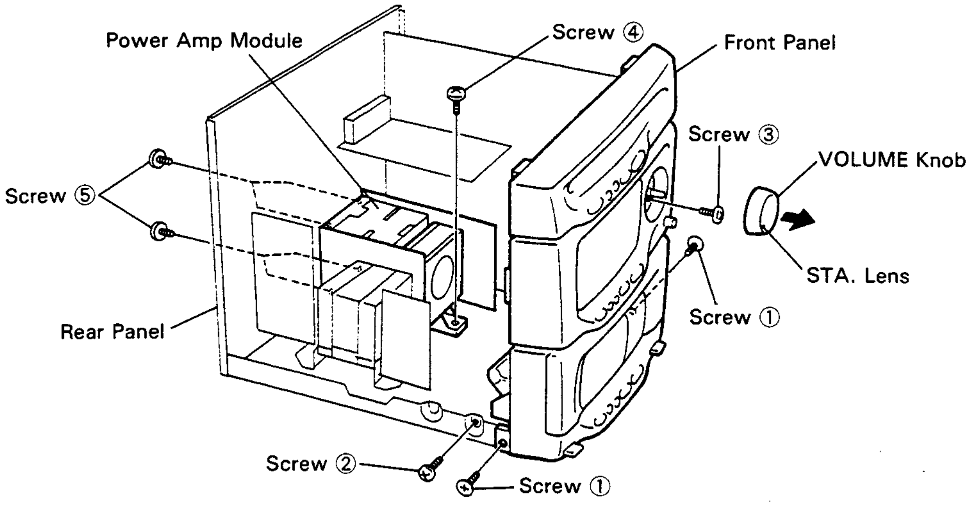

Power Amp Module
Screw ④
Front Panel
Screw ③
VOLUME Knob
Screw ⑤
STA. Lens
Screw ①
Rear Panel
Screw ②
Screw ①

Fig. 2 Remove the Front panel and Power amp module

CASSETTE MECHANISM UNIT, CD SW ASSY AND DISPLAY ASSY

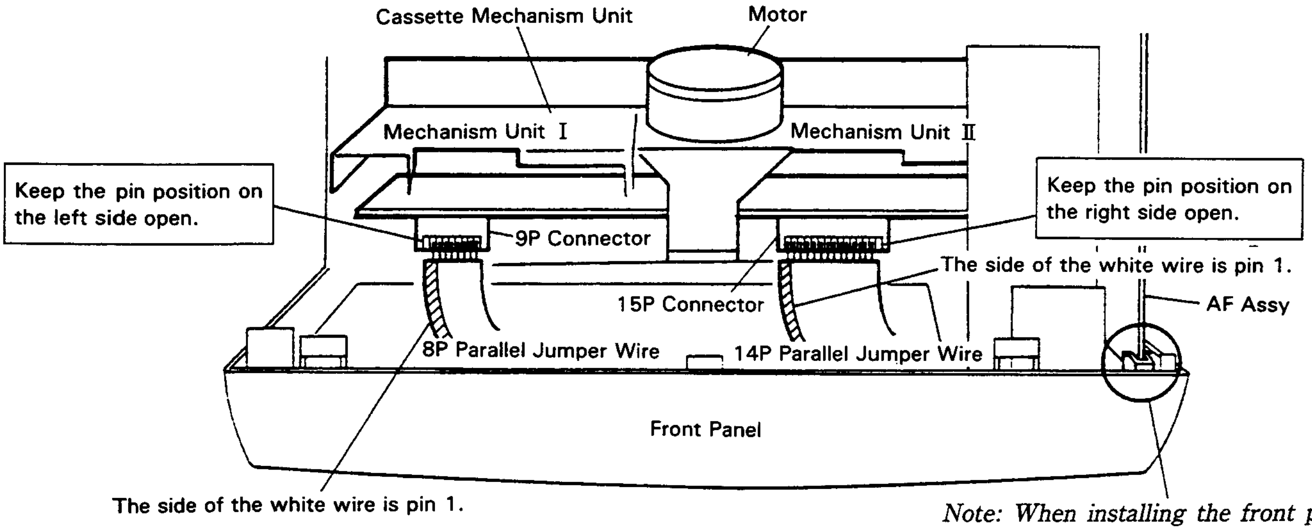
- As the cassette mechanism unit, the CD SW assy, the DISPLAY assy, etc. are installed on the front panel, please refer to the "5. EXPLODED VIEWS, PACKING AND PARTS LIST". (Remove the respective assemblies after removal of the front panel.)

● Installation of the parallel jumper wires connecting the cassette mechanism unit and the AF assy

The connector on the AF assy side is 8P on the side of mechanism unit I and 14P on the side of mechanism unit II, and for the cassette mechanism unit it is 9P on the side of mechanism unit I and 15P on the side of mechanism unit II.
When connecting the parallel jumper wire on cassette mechanism unit side, connect so that the pin position on the outside is open. (Refer to Fig. 3)

● Circuit operation check with removed CD slot-in mechanism

When the CD slot-in mechanism has been removed, the operation of the other circuits, except for the CD part, can be checked.


Cassette Mechanism Unit
Motor
Mechanism Unit I
Mechanism Unit II
Keep the pin position on the left side open.
Keep the pin position on the right side open.
9P Connector
The side of the white wire is pin 1.
15P Connector
AF Assy
8P Parallel Jumper Wire
14P Parallel Jumper Wire
Front Panel
The side of the white wire is pin 1.

Note: When installing the front panel, insert the AF assy into the recess of the front panel.

Fig. 3 Installation of the Parallel Jumper Wire

5. EXPLODED VIEWS, PACKING AND PARTS LIST

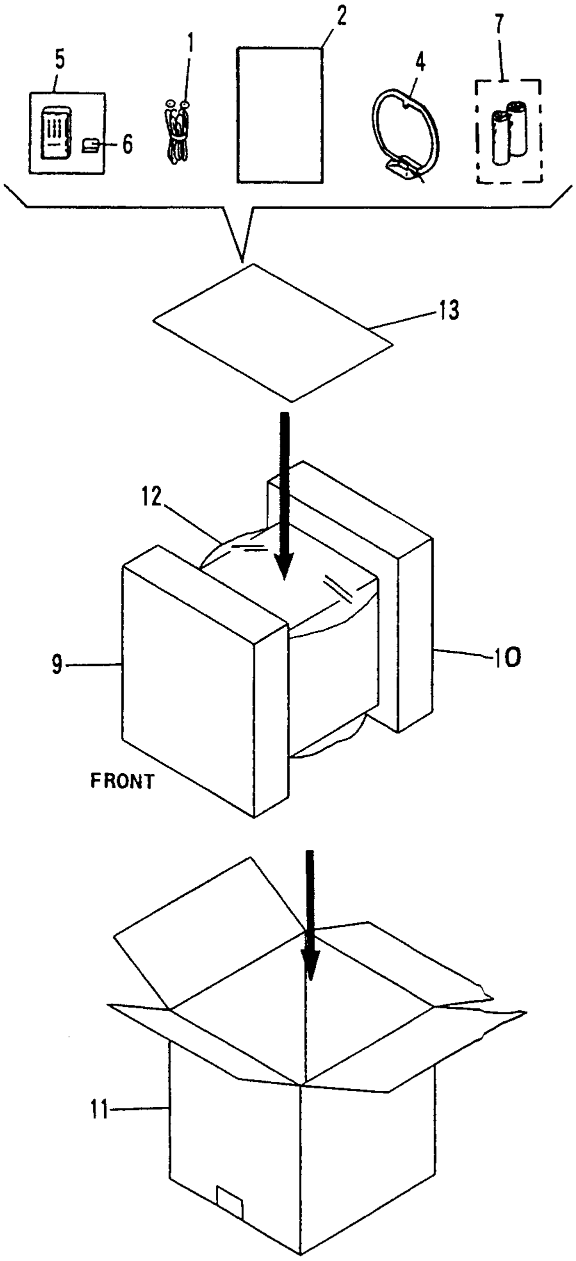
NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

5.1 PACKING (for XR−P350/MEXK/EA)

Parts List

Mark	No.	Description	Parts No.
	1	FM ANTENNA ASSY	ADH1019
	2	OPERATING INSTRUCTIONS (French/Dutch)	ARC7024
	2	OPERATING INSTRUCTIONS (RDS) (French/Dutch)	ARC7026
	2	OPERATING INSTRUCTIONS (German/Italian)	ARC7036
	2	OPERATING INSTRUCTIONS (RDS) (German/Italian)	ARC7037
	3	....	
	4	LOOP ANTENNA	ATB1012
	5	REMOTE CONTROL UNIT (CU−XR015)	AXD7030
	6	BATTERY COVER	AZA7050
NSP	7	BATTERIES (R03, AAA)	PEM1004
	8	....	
	9	FRONT PAD	AHA7039
	10	REAR PAD	AHA7040
	11	PACKING CASE	AHD7087
	12	SHEET	AHG7001
NSP	13	VINYL BAG	AHG1091



5.2 EXPLODED VIEWS

1. Exterior (1/3) (for XR–P350/MEXK/EA)

Parts List

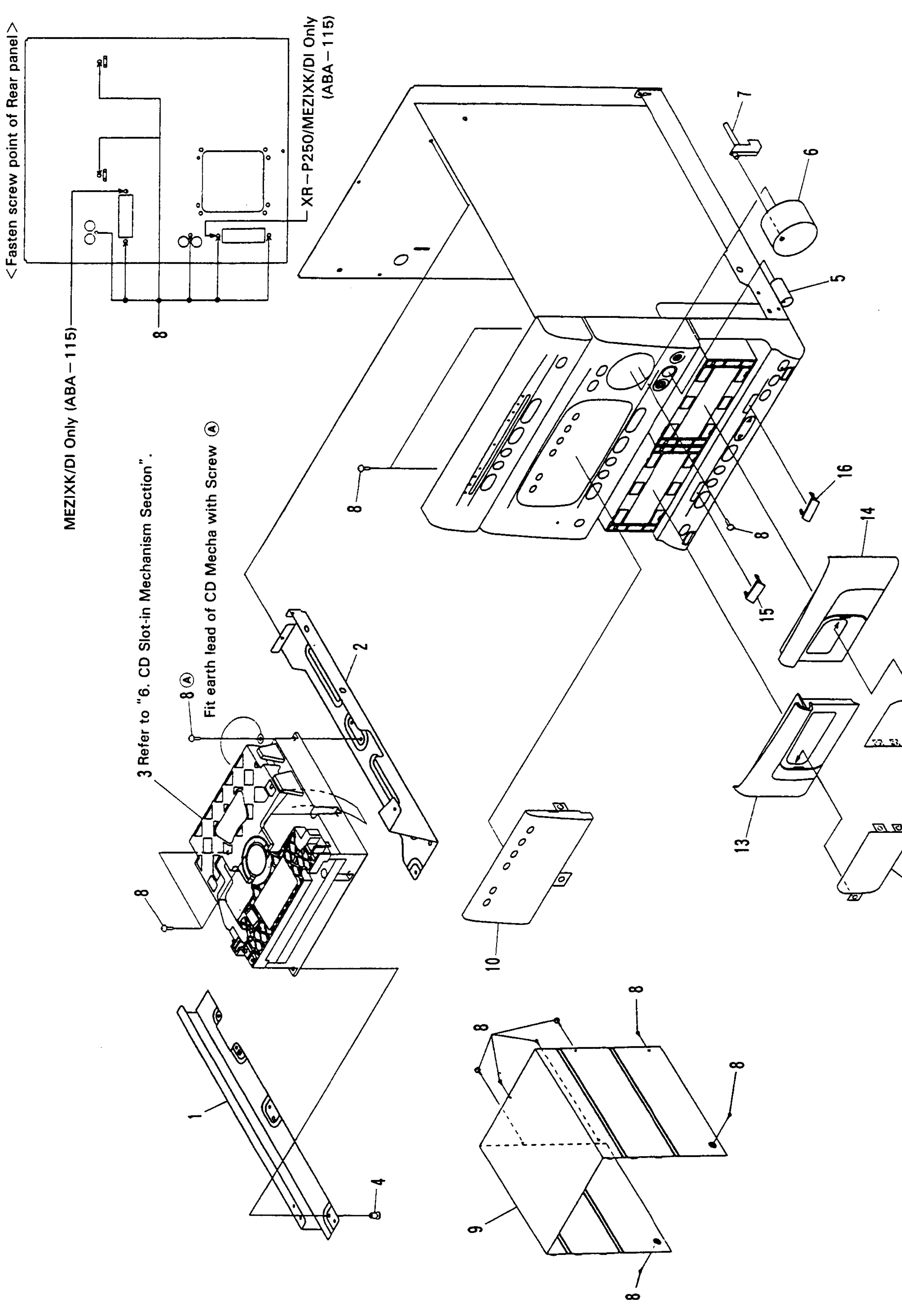
Mark	No.	Description	Parts No.
NSP	1	FRAME L	ANG7015
NSP	2	FRAME R	ANG7016
NSP	3	CD SLOT IN MECHANISM	AXA7014
	4	PLASTIC RIVET	AEC1389
	5	MIC VOLUME KNOB	AAB7045
	6	VOLUME KNOB	AAB7046
	7	STA. LENS	AAK7118
	8	SCREW	BBZ30P080FZK
	9	BONNET CASE	ANE7040
	10	DISPLAY PANEL	AAK7119
	11	DOOR PANEL L	AAK7096
	12	DOOR PANEL R	AAK7097
	13	DECK PANEL L	AAN7059
	14	DECK PANEL R	AAN7060
	15	BLIND MOLD L	AMR7029
	16	BLIND MOLD R	AMR7030

2. Exterior (2/3) (for XR–P350/MEXK/EA)

Parts List

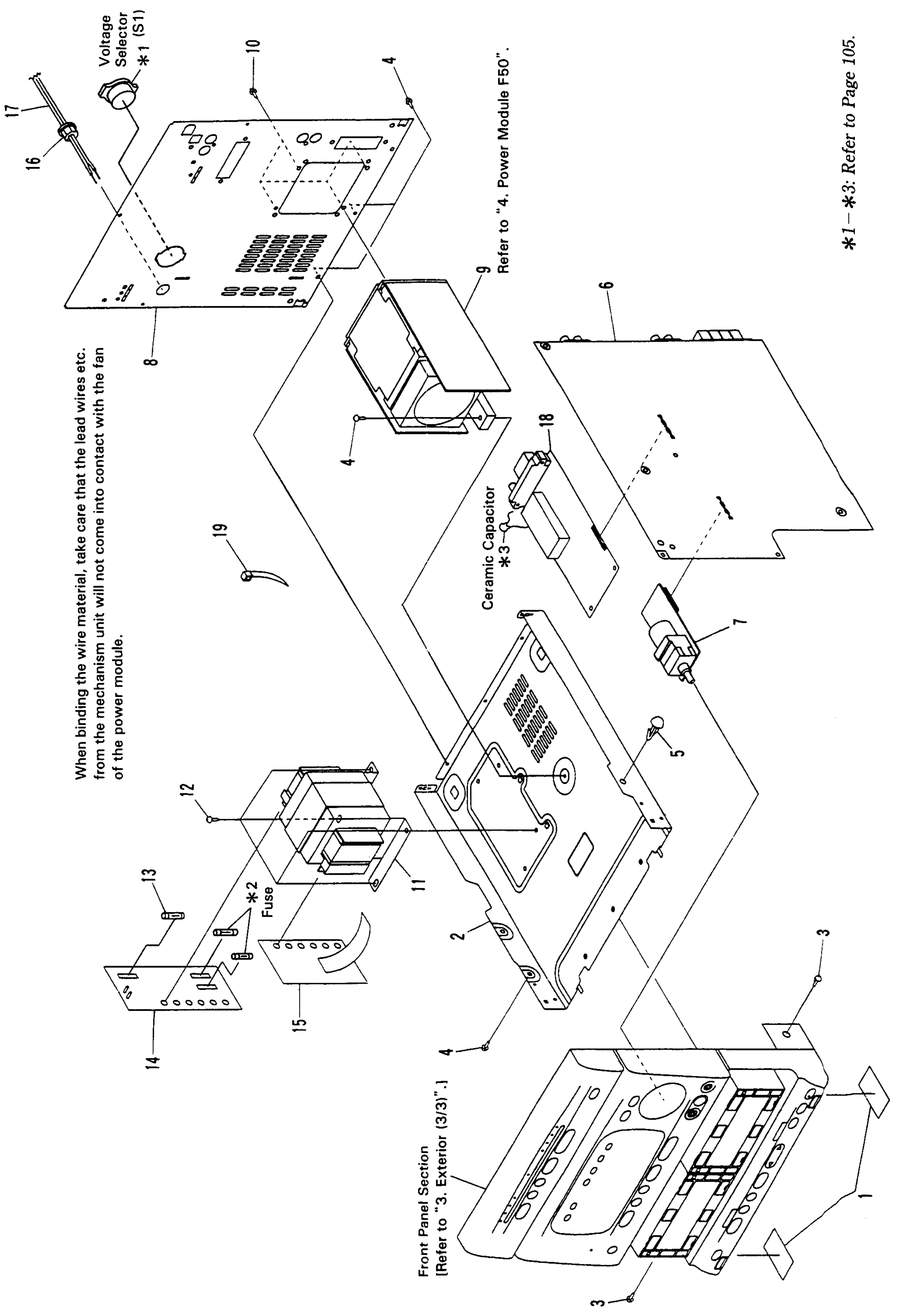
Mark	No.	Description	Parts No.
	1	RUBBER SHEET	AEB1111
NSP	2	CHASSIS	ANA7015
	3	SCREW	CBZ30P080FZK
	4	SCREW	BBZ30P080FZK
NSP	5	SPACER	AEC1360
	6	AF ASSY	AWZ7336
	7	VR ASSY	AWZ7349
	8	REAR PANEL	ANC7161
	9	POWER MODULE F50	AXQ7218
	10	SCREW	BBZ30P080FZK
⚠	11	POWER TRANSFORMER (T1) (AC220–230V)	ATS7032
	12	SCREW	ASZ40P060FMC
⚠	13	FUSE (T1A, FU1)	REK–100
	14	PRIMARY ASSY	AWZ7426
	15	SECONDARY ASSY	AWZ7362
	16	STRAIN RELIEF	CM–22B
⚠	17	AC POWER CORD	ADG1138
	18	TUNER MODULE	AXQ7013
	19	BINDER	Z09–056

1. Exterior (1/3) (for XR−P350/MEXK/EA)


<Fasten screw point of Rear panel>
XR−P250/MEZIXK/DI Only
(ABA−115)
MEZIXK/DI Only (ABA−115)
3 Refer to "6. CD Slot-in Mechanism Section".
Fit earth lead of CD Mecha with Screw Ⓐ
8 Ⓐ
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

2. Exterior (2/3) (for XR−P350/MEXK/EA)


Voltage
Selector
∗1 (S1)
Refer to "4. Power Module F50".
Ceramic Capacitor
∗3
∗2
Fuse
Front Panel Section
[Refer to "3. Exterior (3/3)".]
1
2
3
4
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19

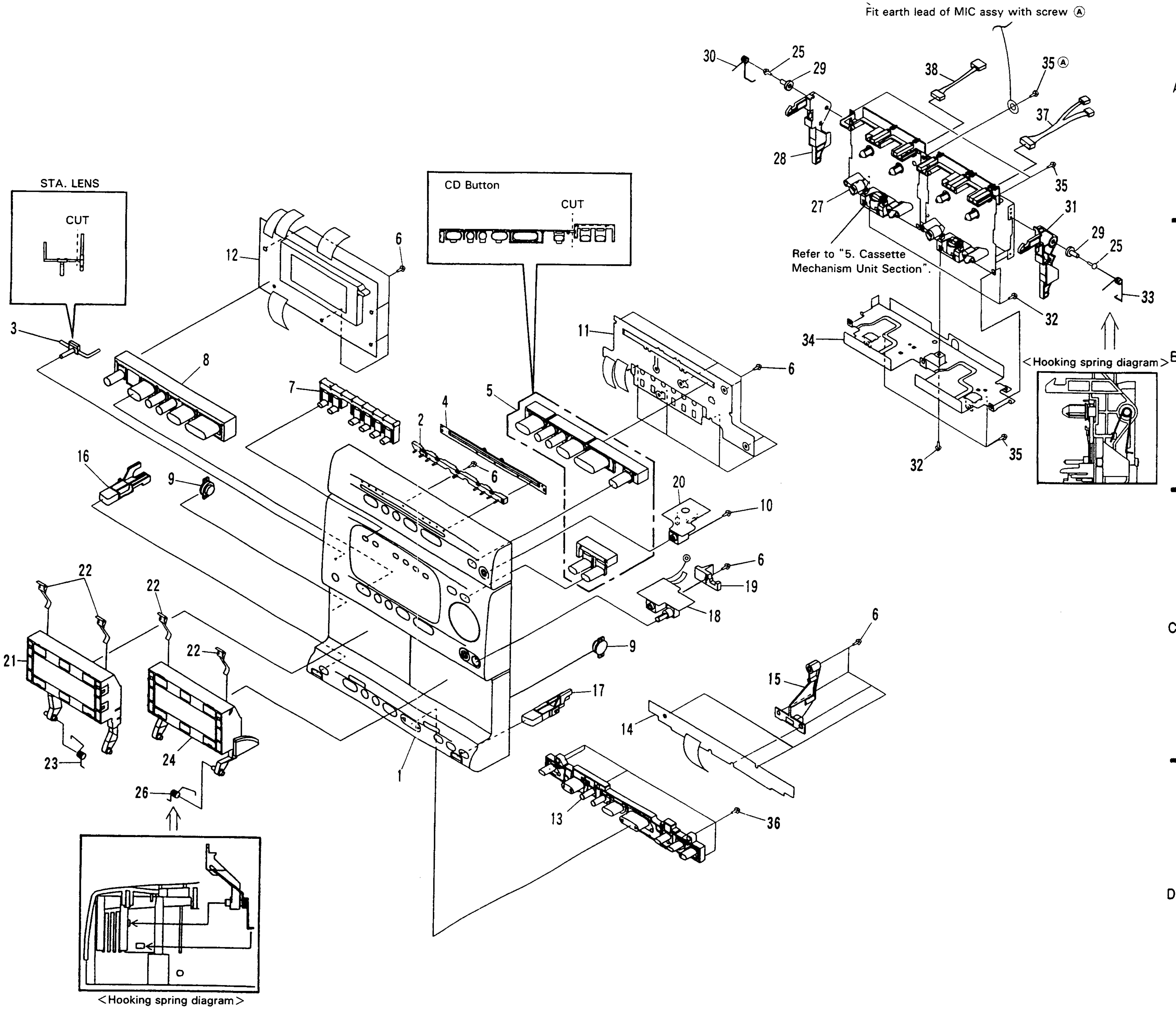
When binding the wire material, take care that the lead wires etc. from the mechanism unit will not come into contact with the fan of the power module.

∗1 − ∗3: Refer to Page 105.

3. Exterior (3/3) (for XR–P350/MEXK/EA)

Parts List

Mark	No.	Description	Parts No.
	1	FRONT PANEL	AMB7188
	2	LENS	AAK7098
	3	STA. LENS	AAK7118
	4	COVER UNIT	AWL7015
	5	CD BUTTON	AAD7121
	6	SCREW	BPZ26P060FMC
	7	TUNER BUTTON	AAD7120
	8	POWER BUTTON	AAD7119
	9	DAMPER ASSY	AXA7021
	10	SCREW	ABA1095
	11	CD SW ASSY	AWZ7412
	12	DISPLAY ASSY	AWZ7388
	13	DECK BUTTON	AAD7122
NSP	14	DECK SW ASSY	AWZ7405
	15	COUPLING MOLD	AMR7026
	16	EJECT BUTTON L	AAD7123
	17	EJECT BUTTON R	AAD7124
NSP	18	MIC ASSY	AWZ7398
	19	MIC HOLDER	AMR7022
NSP	20	H. P. ASSY	AWZ7391
	21	DOOR POCKET L	AAN7051
	22	SPRING	RBK1004
	23	DOOR SPRING L	ABH7032
	24	DOOR POCKET R	AAN7052
	25	SCREW	BSZ20P120FMC
	26	DOOR SPRING R	ABH7033
	27	MECHANISM UNIT	RYM1235
	28	EJECT ARM L	AMR7024
	29	COLLAR	RNK2135
	30	SPRING L	ABH7028
	31	EJECT ARM R	AMR7025
	32	SCREW	BBZ30P080FZK
	33	SPRING R	ABH7029
NSP	34	SHIELD	ANK7007
	35	SCREW	VPZ30P080FZK
	36	SCREW	BPZ26P060FMC
	37	CONNECTOR ASSY 5P	ADX7045
	38	CONNECTOR ASSY 3P	ADX7046


Fit earth lead of MIC assy with screw Ⓐ
STA. LENS
CUT
CD Button
CUT
Refer to "5. Cassette Mechanism Unit Section".
<Hooking spring diagram>
<Hooking spring diagram>
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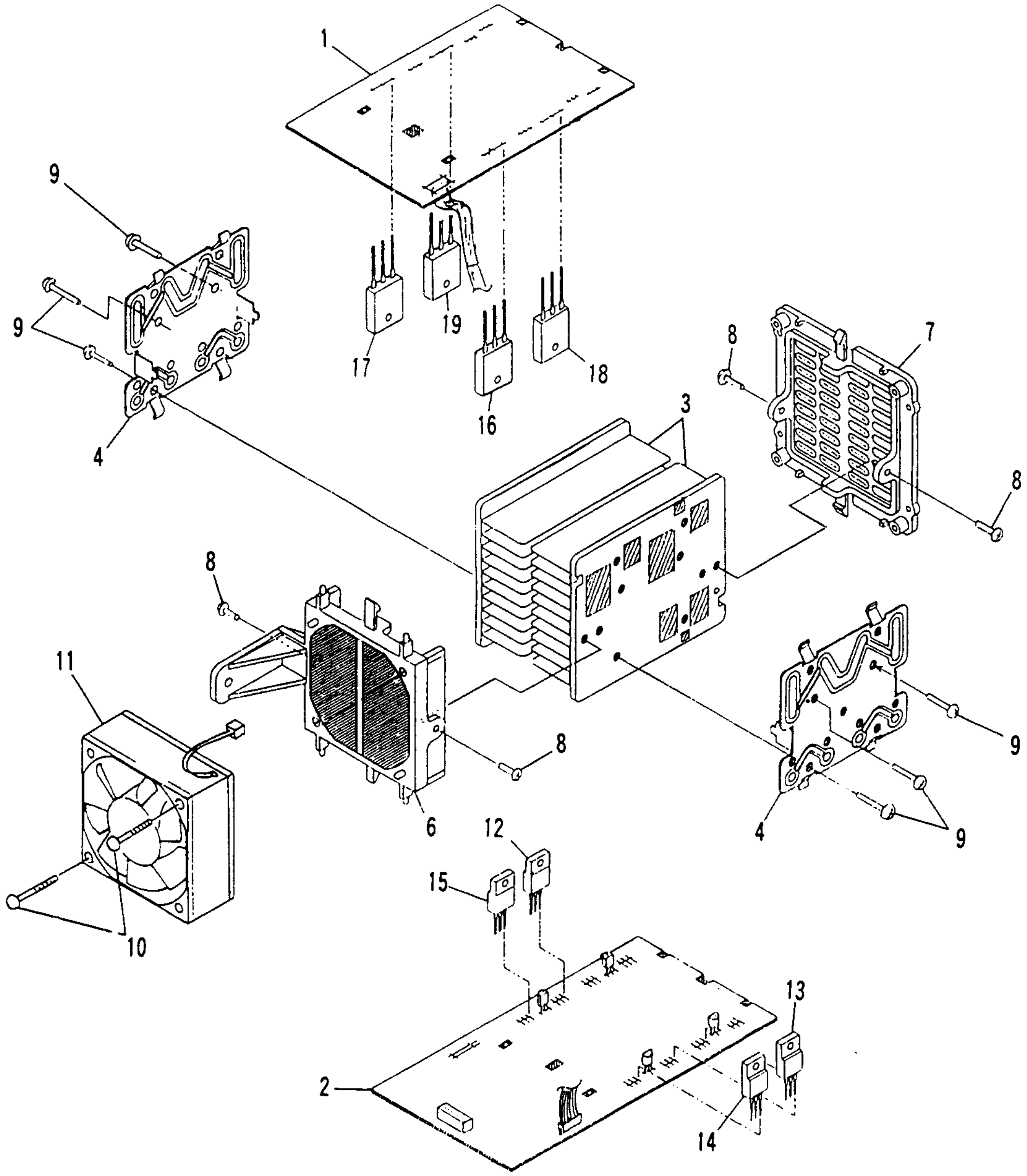
B
C
D

4. Power Module F50

Parts List

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	FRONT 50W ASSY	AWZ7561		11	DC FAN MOTOR	AXM7003
	2	REGULATOR ASSY	AWZ7562		12	REGULATOR IC (IC7401)	NJM7812FAS
	3	HEAT SINK	ANH7009		13	REGULATOR IC (IC7402)	NJM7912FA
	4	BRACKET	ANG1868		14	REGULATOR IC (IC7403)	NJM7812FAS
	5	....			15	REGULATOR IC (IC7404)	NJM7805FAS
	6	MOLD A	AMR7005	⚠	16	TRANSISTOR (Q7511)	2SA1263N
	7	MOLD B	AMR7006	⚠	17	TRANSISTOR (Q7512)	2SA1263N
	8	SCREW (3 × 10)	ABA1021	⚠	18	TRANSISTOR (Q7513)	2SC3180N
	9	SCREW	BBZ30P140FZK	⚠	19	TRANSISTOR (Q7514)	2SC3180N
	10	SCREW	BPZ30P350FZK				



Note: Ensure that silicon grease does not adhere to the MOLD A (No. 6) and MOLD B (No. 7).

5. Cassette Mechanism Unit Section

● Mechanism unit I and II (1/2)

Parts List

Mark	No.	Description	Parts No.
	1	ASSY MOTOR	RXM1080
NSP	2	JUMPER WIRE	RDD1012
	3	BRACKET MOTOR	RNE1830
	4	SPACER	RNK1822
	5	SCREW	RBA1100
	6	SCREW	PCZ20P040FMC

● Mechanism unit I and II (2/2)

Parts List

Mark	No.	Description	Parts No.
	1	ASSY HOLDER HEAD (∗1)	RXA1400
	1	ASSY HOLDER HEAD (∗2)	RXA1664
	2	FRAME HEAD	RNK1715
	3	LEVER HEAD	RNK1716
	4	SPRING AZIMUTH	RBK1006
	5	ASSY ARM ASSIST	RXA1401
	6	GEAR ARM HEAD	RNK1717
	7	SPRING CASSETTE	RBK1039
	8	EJECT LOCK	RNK1718
	9	CAP REEL	RNK1719
	10	ASSY PINCH ARM L	RXA1403
	11	CHASSIS HEAD	RNE1437
	12	ASSY PINCH ARM R	RXA1404
	13	ARM PLAY L	RNK1866
	14	GEAR PLAY	RNK1867
	15	ARM PLAY R	RNK1868
	16	CHASSIS OS	RXA1411
	17	ASSY SUB REEL L	RXA1407
	18	SOLENOID	RXP1020
	19	WIRE	RDC1006
	20	ARM RVS	RNK1721
	21	GEAR FF	RNK1723
	22	ASSY ARM FR	RXA1412
	23	ASSY PULLEY FR	RXA1413
	24	BELT FR	REB1158
	25	METAL	RNG1048
	26	ASSY FLYWHEEL L (∗1)	RXA1666
	26	ASSY FLYWHEEL L2 (∗2)	RXA1668
	27	METAL	RNG1005
	28	ARM BRAKE	RNK1724
	29	ASSY SUB REEL R	RXA1408
	30	ARM TRIGER	RNK1722
	31	GEAR CAM	RNK1725
	32	METAL	RNG1049
	33	ASSY FLYWHEEL R (∗1)	RXA1667
	33	ASSY FLYWHEEL R2 (∗2)	RXA1669
	34	METAL	RNG1004
	35	....	
	36	....	
	37	P. C. BOARD	RNP1610
	38	SWITCH MODE	RSN1020
	39	SWITCH (LEAF)	RSN1019
	40	HALL IC	DN6851A
	41	ASSY BRACKET (∗1)	RXA1665
	41	BRACKET FW (∗2)	RNE1438
	42	PULLEY (∗1 only)	RNK2132
	43	....	
	44	....	
	45	BELT MAIN (∗1)	REB1273
	45	BELT MAIN (∗2)	REB1272
	46	P. C. BOARD	RNP1348
	47	HOUSING (∗1)	RKP1396
	47	HOUSING (∗2)	RKP1397
	48	CONNECTOR (∗1)	RKP1713
	48	CONNECTOR (∗2)	RKP1714
	49	....	
	50	....	
	51	SPRING	RBH1282
	52	SPRING	RBH1283
	53	SPRING	RBH1284
	54	SPRING	RBH1286
	55	SPRING	RBH1288
	56	SPRING	RBH1291
	57	SPRING	RBH1285
	58	SPRING	RBH1287
	59	SPRING	RBH1289
	60	SPRING	RBH1290
	61	SPRING	RBH1292
	62	FWP SP (SPRING)	RBH1061
	63	SPRING	RBH1325
	64	SCREW (FOR AZIMUTH)	RBA1023
	65	SCREW	RBA1027
	66	SCREW	RBA1030
	67	SCREW	PCZ20P040FMC
	68	SCREW	RBA1093
	69	SCREW	RBA1094
	70	WASHER	RBF1046
	71	WASHER	WA26D047D013
	72	WASHER (∗1 only)	WT13D030D025

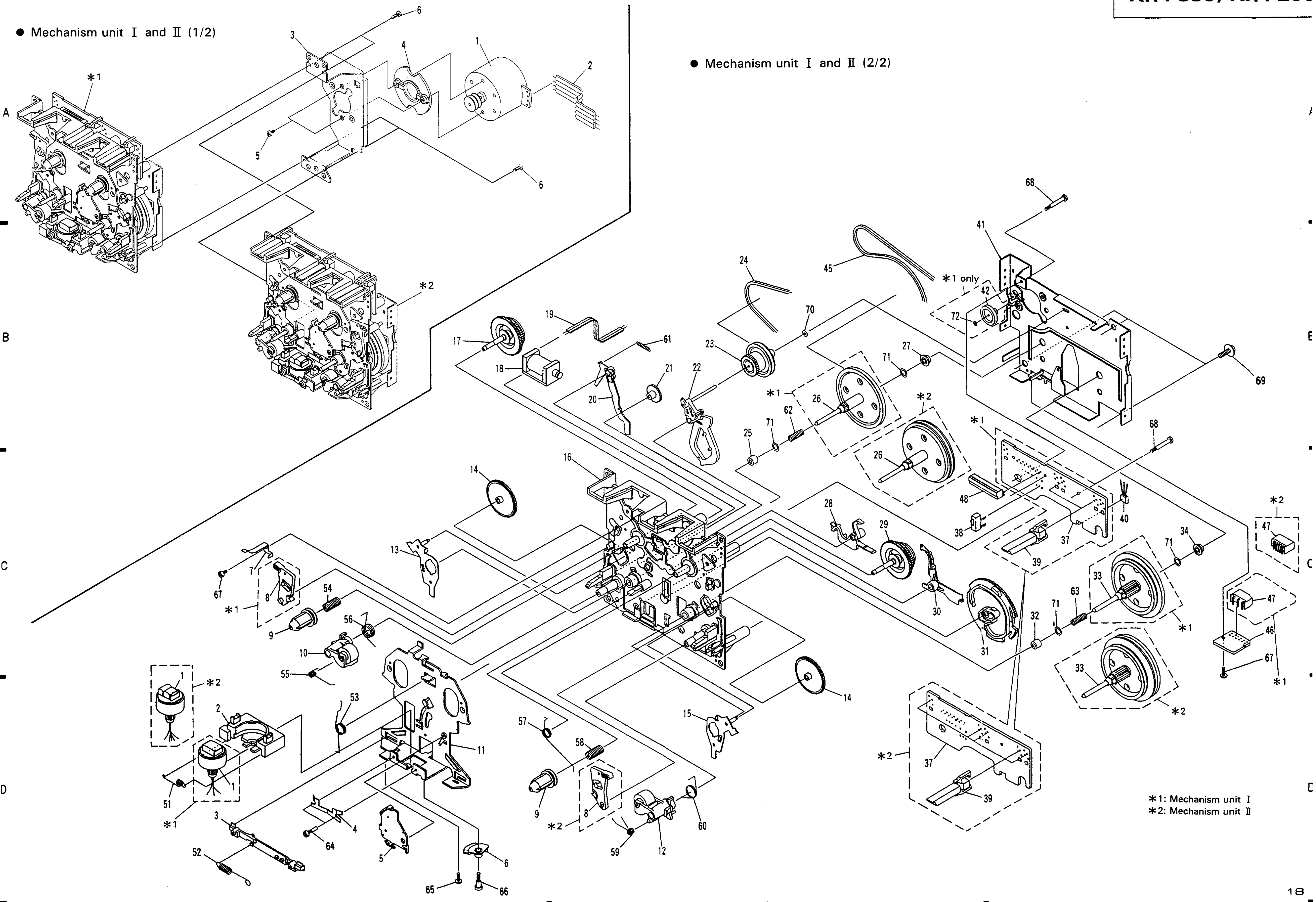
Note)

∗1: Mechanism Unit I

∗2: Mechanism Unit II

- Mechanism unit Ⅰ and Ⅱ (1/2)

- Mechanism unit Ⅰ and Ⅱ (2/2)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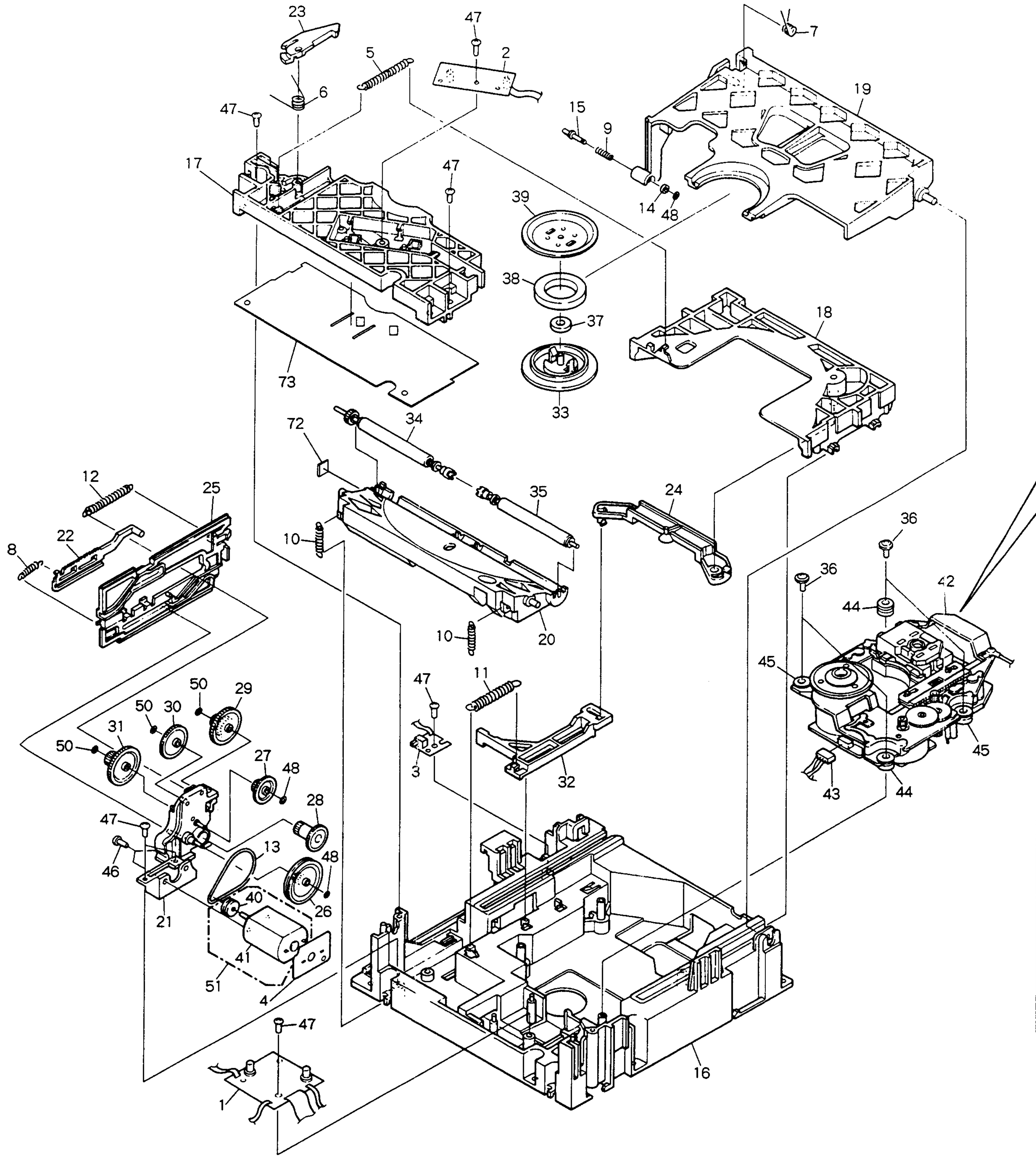
*1: Mechanism unit Ⅰ
*2: Mechanism unit Ⅱ

6. CD Slot-in Mechanism Section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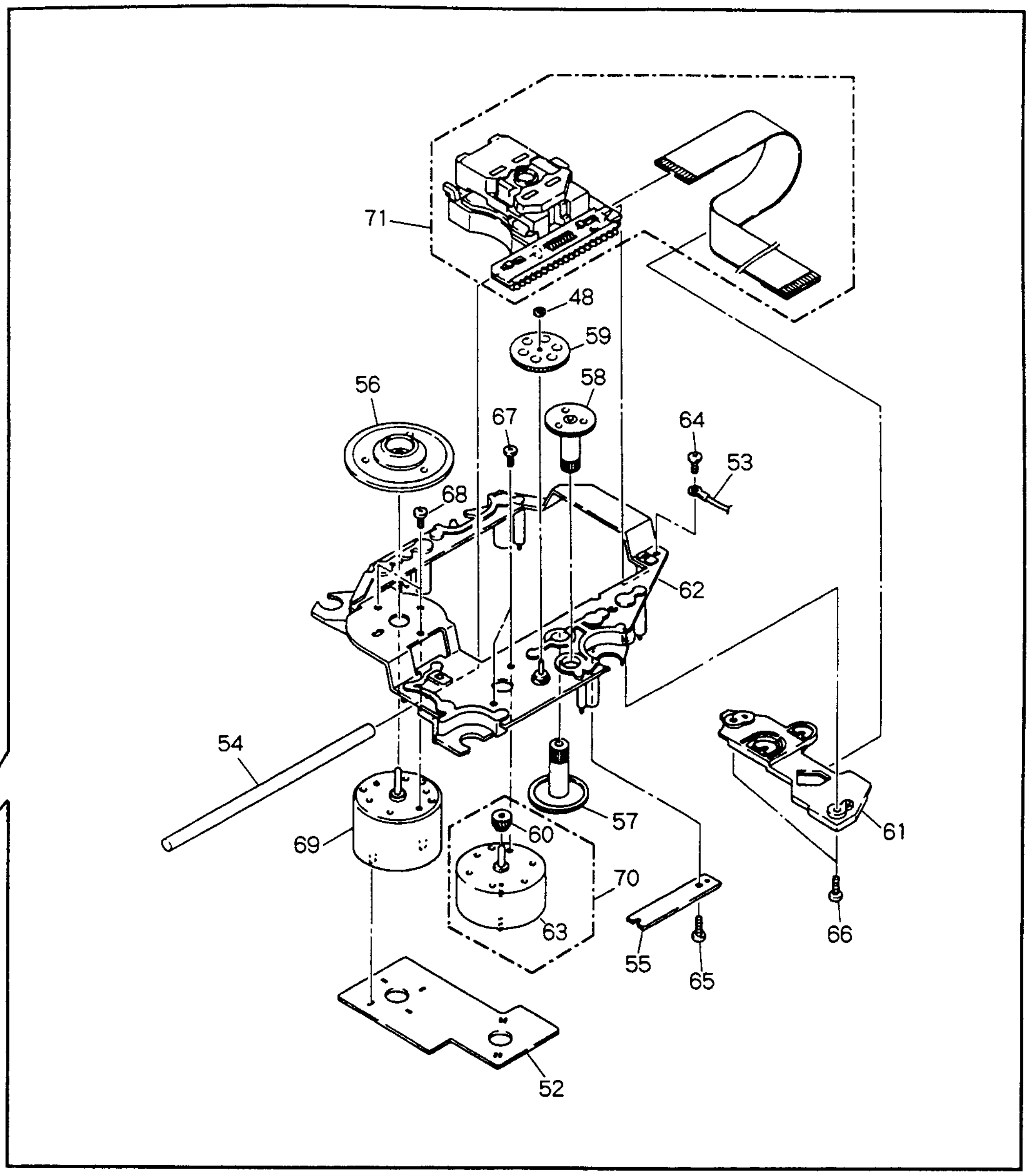
Servo Mechanism Assy SL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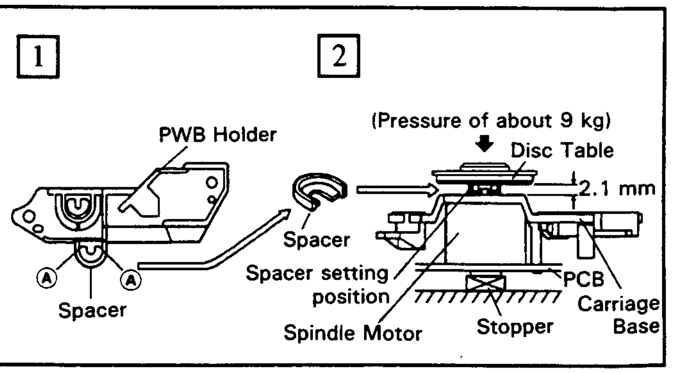
- **How to install the disc table**

1. Use nippers or other tool to cut the two sections marked Ⓐ in figure. Then remove the spacer.
2. While supporting the spindle motor shaft with the stopper, put spacer on top of carriage bese, and stick the disc table on top (takes about 9 kg pressure). Detach the spacer.


1
2
PWB Holder
(Pressure of about 9 kg)
Disc Table
2.1 mm
Spacer
Spacer setting position
PCB
Carriage Base
Spindle Motor
Stopper
Ⓐ
Ⓐ
Spacer

Parts List

Mark	No.	Description	Parts No.
NSP	1	SENSOR BOARD ASSY	AWZ7328
NSP	2	LED BOARD ASSY	AWZ7329
NSP	3	SW BOARD ASSY	AWZ7330
NSP	4	MOTOR BOARD ASSY	AWZ7331
	5	SPRING	ABH7035
	6	ROCK LEVER SPRING	ABH7019
	7	CLAMP SPRING	ABH7020
	8	RACK SPRING	ABH7021
	9	P SPRING	ABH7022
	10	ROLLER HOLDER SPRING	ABH7023
	11	SPRING B	ABH7024
	12	CAM PLATE SPRING	ABH7025
	13	BELT A	AEB7012
	14	WASHER	AEB7018
	15	PIN	ALA7005
	16	MECHANISM BASE	ANW7022
	17	DISC PLATE	ANW7023
	18	CENTERING PLATE	ANW7024
	19	CLAMPER HOLDER	ANW7025
	20	ROLLER HOLDER	ANW7026
	21	GEAR HOLDER	ANW7027
	22	RACK	ANW7028
	23	ROCK LEVER	ANW7029
	24	STARTING LEVER	ANW7030
	25	CAM PLATE	ANW7031
	26	GEAR PULLEY	ANW7032
	27	GEAR A	ANW7033
	28	GEAR B	ANW7034
	29	GEAR C	ANW7035
	30	GEAR D	ANW7036
	31	DRIVE GEAR	ANW7037
	32	STARTING PLATE	ANW7038
	33	CLAMPER	ANW7044
	34	ROLLER ASSY L	AXA7019
	35	ROLLER ASSY R	AXA7020
	36	SCREW	PBA1048
NSP	37	H SPACER	PEB1249
	38	CLAMP MAGNET	PMF1014
	39	YOKE	PNB1216
	40	MOTOR PULLEY	PNW1634
NSP	41	MOTOR	PXM1002
NSP	42	SERVO MECHANISM ASSY SL	AXA7017
	43	CONNECTOR ASSY 2P (2MM PITCH)	PDE1238
	44	FLOAT RUBBER	PEB1014
	45	FLOAT RUBBER	PEB1132
	46	SCREW	BMZ20P040FMC
	47	SCREW	PPZ30P060FMC
	48	WASHER	WT12D032D025
	49	....	
	50	WASHER	WT17D034D025

Mark	No.	Description	Parts No.
	51	MOTOR ASSY	AEA7000
NSP	52	MECHANISM BOARD ASSY	PWX1192
	53	GROUND LEAD UNIT	PDF1104
	54	GUIDE BAR	PLA1094
NSP	55	GEAR STOPPER	PNB1303
	56	DISC TABLE	PNW1608
	57	GEAR 1	PNW2052
	58	GEAR 2	PNW2053
	59	GEAR 3	PNW2054
	60	PINION GEAR	PNW2055
	61	PWB HOLDER	PNW2057
	62	CARRIAGE BASE	PNW2445
NSP	63	DC MOTOR (CARRIAGE)	PXM1027
	64	SCREW	BBZ26P060FMC
	65	SCREW	BPZ20P060FMC
	66	SCREW	BPZ26P100FMC
	67	SCREW	JFZ17P025FZK
	68	SCREW	JFZ20P030FNI
	69	DC MOTOR ASSY (SPINDLE)	PEA1235
	70	DC MOTOR ASSY (CARRIAGE)	PEA1246
	71	PICKUP ASSY	PEA1291
	72	AV SHEET	AEB7021
	73	DISC PLATE SHEET	AEB7022

6. PCB PARTS LIST

For XR－P350/MEXK/EA

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 ························ RD1/8PM $\boxed{5}\ \boxed{6}\ \boxed{1}$ J
47kΩ → 47 × 10^3 → 473 ························ RD1/4PS $\boxed{4}\ \boxed{7}\ \boxed{3}$ J
0.5Ω → 0R5 ·· RN2H $\boxed{0}\ \boxed{R}\ \boxed{5}$ K
1Ω → 010 ·· RS1P $\boxed{0}\ \boxed{1}\ \boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10^1 → 5621 ·················· RM1/4PC $\boxed{5}\ \boxed{6}\ \boxed{2}\ \boxed{1}$ F

LIST OF ASSEMBLIES

Mark	No. Description	Parts No.
NSP	MAIN ASSY	AWK7089
	├─AF ASSY	AWZ7336
	├─VR ASSY	AWZ7349
	├─SECONDARY ASSY	AWZ7362
	└─PRIMARY ASSY	AWZ7426
NSP	COMPLEX ASSY	AWM7116
	├─DISPLAY ASSY	AWZ7388
NSP	├─H. P. ASSY	AWZ7391
NSP	├─MIC ASSY	AWZ7398
NSP	├─DECK SW ASSY	AWZ7405
	└─CD SW ASSY	AWZ7412
	TUNER MODULE	AXQ7013
	POWER MODULE F50	AXQ7218
	├─FRONT 50W ASSY	AWZ7561
	└─REGULATOR ASSY	AWZ7562
NSP	CD SLOT-IN MECHANISM	AXA7014
NSP	├─SL MECHANISM BOARD ASSY	AWX7007
NSP	│　├─SENSOR BOARD ASSY	AWZ7328
NSP	│　├─LED BOARD ASSY	AWZ7329
NSP	│　├─SW BOARD ASSY	AWZ7330
NSP	│　└─MOTOR BOARD ASSY	AWZ7331
NSP	└─SERVO MECHANISM ASSY SL	AXA7017
NSP	└─MECHANISM BOARD ASSY	PWX1192

AF ASSY

SEMICONDUCTORS

Mark	No. Description	Parts No.
	IC2101	BU4052BCF
	IC4202	BU4066BCF
	IC4421	CXA1101P
	IC8151	CXA1372Q
	IC8301	CXD2508AQ
	IC1999	ICP－N20
	IC3501	LA2232M
⚠	IC8201, IC8202	LA6520
	IC4101, IC4301, IC8401	NJM4558MD
	IC1101	PD4562A
	IC2103	PM0006A
	Q1051, Q3501	2SA1048
	Q1002, Q1006, Q1040, Q4113, Q4352	2SA1515
	Q1005	2SB560
	Q4356	2SC2240
	Q3503, Q4101, Q4102, Q4203－Q4206	2SC2458
	Q4301, Q4302, Q4305, Q4306	2SC2458
	Q4451－Q4454	2SC2458
	Q1003, Q4111, Q4161, Q4353, Q4354	2SC3377
	Q1403, Q4355, Q8401, Q8402	2SD2144S
	Q105	2SD438
	Q8301	2SK246
	Q4307, Q4308	2SK373
	Q1004, Q4456, Q8302, Q8403, Q8404	DTA143ES
	Q1001, Q1007, Q1041, Q1100, Q3502	DTC143ES
	Q4112, Q4207, Q4351, Q4455	DTC143ES
	D1013－D1020	11ES2
	D1021, D1022, D1027, D1031－D1033	1SS254
	D1104, D1153, D4111－D4113	1SS254
	D4161, D4162, D4201, D4202	1SS254
	D4301－D4306, D4551, D4552, D8301	1SS254
⚠	D1001	D3SBA20 (B)
	D1023	MTZJ33B
	D1151, D1152	MTZJ5.1B/C
	D1011	MTZJ5.6B
	D8218	MTZJ6.2B/C
	D1010	MTZJ7.5B
⚠	D1003－D1006, D1035, D1998, D1999	S5566
⚠	D1007, D1008, D1034	S5688G

COILS AND FILTERS

Mark	No. Description	Parts No.
	L8321	LAU1R2J
	L1101	LAU220J
	L4301, L4302	LTA472J
	L4303, L4304	LTA822J
	F4401, F4402	RTF1209

TRANSFORMERS

Mark	No. Description	Parts No.
	T4351	ATX－043

CAPACITORS

Mark	No. Description	Parts No.
	C4361 (2000P/630V)	ACE1020
	C1009 (0.01/150V)	ACG1005
	C4319, C4320	CCCSL271K500
	C4323, C4324, C8322	CCSQCH100D50
	C8407－C8410	CCSQCH121J50
	C8323	CCSQCH220J50
	C4353	CCSQCH221J50
	C3508, C8403－C8406	CCSQCH271J50
	C4998, C4999, C8401, C8402	CCSQCH391J50
	C4191, C4192	CCSQCH470J50

Mark	No.	Description	Parts No.
	C4101, C4102		CCSQCH471J50
	C4151, C4152, C4355		CCSQCH681J50
	C1112, C1113, C8350, C8351		CCSQSL101J50
	C8411, C8412		CEANP2R2M50
	C4303, C4304, C4451, C4452		CEAS010M50
	C2403, C2404		CEAS0R1M50
	C1019, C3509, C3511, C4359, C4360		CEAS100M50
	C4364, C4403–C4405, C4407, C4454		CEAS100M50
	C1011, C1016, C4401, C4408		CEAS101M10
	C1018		CEAS101M63
	C1004		CEAS102M35
	C1224		CEAS1R5M50
	C1007, C3504, C4453		CEAS220M50
	C1103		CEAS221M10
	C1017, C1099		CEAS221M35
	C1003		CEAS222M35
	C1001, C1002		CEAS222M50
	C4103, C4104, C4309, C4310		CEAS330M16
	C4317, C4318, C8301		CEAS330M16
	C8175, C8176		CEAS331M16
	C4357		CEAS3R3M50
	C1014, C2251, C2252, C4107, C4108		CEAS470M16
	C4351		CEAS470M16
	C1225		CEAS470M25
	C1021		CEAS470M50
	C2201, C2202, C3503, C3510, C3512		CEAS4R7M50
	C4207, C4208, C4301, C4302		CEAS4R7M50
	C4315, C4316, C8160, C8162		CEAS4R7M50
	C8309		CEASR47M50
	C4402, C4406		CEASR68M50
	C8302		CGCYX104K25
	C4363		CKCYB222K500
	C2203, C2209, C8171, C8321		CKSQYB102K50
	C4352, C4354, C8157, C8164, C8167		CKSQYB103K50
	C8169, C8218, C8308, C8361		CKSQYB103K50
	C4411, C4412, C8306		CKSQYB152K50
	C4313, C4314		CKSQYB182K50
	C4307, C4308		CKSQYB273K50
	C3505, C3506, C8170		CKSQYB332K50
	C4305, C4306, C8156, C8168		CKSQYB333K50
	C8172		CKSQYB472K50
	C8307		CKSQYB473K50
	C8155		CKSQYB561K50
	C2208		CKSQYB562K50
	C3516		CKSQYB682K50
	C2210, C2211		CKSQYB822K50
	C3501, C3507, C8207, C8210, C8215		CKSQYF103Z50
	C8219		CKSQYF103Z50
	C1301–C1304, C2206, C2207, C2212		CKSQYF104Z50
	C8158, C8159, C8161, C8163, C8220		CKSQYF104Z50
	C8303, C8420, C8421		CKSQYF104Z50
	C3513		CKSQYF223Z50
	C3514, C3515		CKSQYF333Z50
	C1101, C1102, C1110, C1111, C1114		CKSQYF473Z50
	C4409, C4410		CQMA103J50
	C4358		CQMA123K250
	C4356		CQMA153J50
	C4362		CQMA562K400
	C4105, C4106		CQMA682J50
	C2204, C2205		CQMA683J50
	C4311, C4312		CQMA823J50

Mark	No.	Description	Parts No.

RESISTORS

	VR4111	(2.2K)	PCP1025
	VR3501, VR4301, VR4302	(4.7K)	PCP1028
	VR4201–VR4204	(10K)	PCP1029
	VR8151, VR8152	(22K)	PCP1030
	VR4351, VR4352	(220K)	PCP1033
	R4352		RD1/2PM102J
	R1157		RD1/2PM152J
	R1002		RD1/2PM272J
	R4353		RD1/2PM470J
	R1159–R1162		RD1/2PM680J
	R4357		RD1/2PM6R8J
	R1064, R1153		RD1/4PM102J
	R4117		RD1/4PM122J
	R1995		RD1/6PM010J
	R1021, R1199, R3502, R8454		RD1/6PM102J
	R1003, R1022, R1102, R4112, R4416		RD1/6PM103J
	R4211, R4212		RD1/6PM153J
	R1041		RD1/6PM222J
	R1051		RD1/6PM331J
	R1151, R1178		RD1/6PM472J
	R3520		RD1/6PM563J
	R4113, R4114, R4323, R4324		RD1/6PM820J
	R1223		RS1LMF122J
	R1998		RS2LMF220J
	R1999		RS2LMF2R2J
	R1007, R1017		RS2LMFR22J
	Other Resistors		RS1/10S□□□J

OTHERS

	CN8131	CONNECTOR (12P)	12FMZ–ABT
	CN8202	CONNECTOR (4P)	173981–4
	CN8205	6P JUMPER CONNECTOR	52147–0610
	CN2101	PIN JACK (2P) (VIDEO/AUX)	AKB1100
		PIN JACK (2P) (SPEAKERS • REAR)	AKB1164
		SPEAKER TERMINAL 4–P	AKE–109
	X8301	(33.8688MHZ)	ASS7000
	X3501	(456KHZ)	ASS7001
	CN4003	2P TOP POST	B2B–EH
	CN4002	3P TOP POST	B3B–EH
	CN4001	3P TOP POST	B3B–EH–R
	CN1	CONNECTOR (13P)	KPE13
	CN7	CONNECTOR (4P)	KPE4
		PCB BINDER	VEF1008
	CN8201	JACK	VKN–004
	X1101	(4.19MHZ)	VSS1014

VR ASSY

SEMICONDUCTORS

	IC1501		NJM4558M–D
	IC1551		TA8409S
	Q1501, Q1502		2SC2458
	Q1503		DTA143ES

CAPACITORS

	C1511, C1512		CEAS010M50
	C1599		CEAS470M50
	C1501–C1504		CEAS4R7M50
	C1557, C1558		CKSQYB473K50
	C1551–C1553		CKSQYF104Z50
	C1555, C1556		CCSQSL221J50

RESISTORS

	VR301	(100K–A5 × 2)	ACX7003
	Other Resistors		RS1/10S□□□J

SECONDARY ASSY

SECONDARY assy has no service part.

PRIMARY ASSY

PRIMARY assy has no service part.

DISPLAY ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC3701 – IC3703		NJM4558MD
	IC1901		PDC022A
	Q1901		2SC2458
	Q1701 – Q1705		DTA143ES
	Q1902		DTC143ES
	D1801 – D1808, D1810, D1819, D1901		1SS254
	D1903, D1905, D1907, D1908, D1910		1SS254
	D3701 – D3706		1SS254
	D1715		BR3372XJ65A
	D3751, D3752		MTZJ5.1B/C
	D1904		MTZJ6.8B

COILS AND FILTERS

	L1901		LAU220J

SWITCHES AND RELAYS

	S1801 – S1807		ASG1051

CAPACITORS

	C1903	(0.047μF/5.5V)	ACH1246
	C3707, C3708, C3710, C3711		CCSQCH271J50
	C1906		CEAS331M10
	C1917		CEAS470M50
	C1908		CEJA010M50
	C1910		CEJA100M50
	C3751, C3752		CEJA220M10
	C1902		CEJA470M16
	C1907		CEJAR47M50
	C1909		CKSQYB102K50
	C3701, C3702, C3716, C3717		CKSQYB152K50
	C3704, C3705, C3713, C3714		CKSQYB153K50
	C3703, C3706, C3709, C3712, C3715		CKSQYB473K50
	C3718		CKSQYB473K50
	C1913		CKSQYF104Z50
	C1901, C1904, C1905, C1911, C1912		CKSQYF473Z50

RESISTORS

	R1758		RA15T473J
	R3751		RD1/2PM181J
	R3752		RD1/2PM331J
	R1905		RD1/4PM103J
	R1965 – R1969		RD1/4PM472J
	R1740		RD1/6PM221J
	R1801 – R1805		RD1/6PM223J
		Other Resistors	RS1/10S□□□J

OTHERS

	V1701	FL TUBE	AAV7009
		REMOTE SENSOR UNIT	SBX1785
	X1901	(6.00MHZ)	VSS1045

H. P. ASSY

RESISTORS

	R1201, R1202		RS2LMF331J

OTHERS

Mark	No.	Description	Parts No.
	CN1251	JACK	AKN1028

MIC ASSY

SEMICONDUCTORS

	IC2501		NJM4558MD

CAPACITORS

	C2504		CCSQCH221J50
	C2503, C2505, C2510		CEJA100M50
	C2501		CKSQYB122K50
	C2506		CKSQYB682K50
	C2507 – C2509		CKSQYF473Z50

RESISTORS

	VR2501	(10K – B)	ACS1028
		Other Resistors	RS1/10S□□□J

OTHERS

	CN2501	MINI JACK	AKN – 207

DECK SW ASSY

SEMICONDUCTORS

	D1702		AEL1122
	D1701, D1703, D1704		AEL1130
	D1705		BR3372XJ30A

SWITCHES AND RELAYS

	S1809 – S1818		ASG1051

RESISTORS

		All Resistors	RS1/10S□□□J

CD SW ASSY

SEMICONDUCTORS

	Q1706 – Q1709		2SA1037K
	Q1710		DTA143EK
	D1721 – D1724, D1726 – D1729		GL1EG21
	D1725		GL1HS21

SWITCHES AND RELAYS

	S1819 – S1833		ASG1051

RESISTORS

	R1707, R1711, R1715, R1719		RD1/4PM241J
	R1722		RD1/6PM181J
	R1706, R1710, R1714, R1718		RD1/6PM241J
		Other Resistors	RS1/10S□□□J

TUNER MODULE

SEMICONDUCTORS

	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101, D6102		1T33

Mark	No.	Description	Parts No.

COILS AND FILTERS

	L6104		ATC1003
	L6101		ATC1020
	L6102		ATC1021
	L6207	(10.7MHZ)	ATE1013
	F6203, F6204		ATF−119
	F6101		ATF−155
	F6202	(450KHZ)	ATF1155
	L6103	(2.2UH)	ATH1043
	L6202, L6203, L6208		LCTA2R2J3225

TRANSFORMERS

	T6101		ATE−063

CAPACITORS

	C6234, C6236, C6270	(1μF/16V)	ACG1051
	C6107		CCSCH010C50
	C6229		CCSCH821J50
	C6110		CCSQCH020C50
	C6101		CCSQCH050C50
	C6108, C6203, C6269		CCSQCH101J50
	C6111, C6116, C6208, C6221, C6222		CCSQCH150J50
	C6115		CCSQCH330J50
	C6114		CCSQRH080D50
	C6113		CCSQRH180J50
	C6105		CCSQTH150J50
	C6261		CEAS010M50
	C6224, C6246, C6262		CEAS100M50
	C6216, C6217		CEAS330M16
	C6231, C6233		CEAS3R3M50
	C6219		CEAS470M10
	C6243−C6245		CEAS470M16
	C6227		CEAS470M25
	C6238		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6103, C6106, C6112, C6204		CKSQYB102K50
	C6102, C6109, C6117, C6210, C6264		CKSQYB103K50
	C6213		CKSQYB223K50
	C6230		CKSQYB273K50
	C6228		CKSQYB472K50
	C6209, C6237, C6265, C6267		CKSQYB473K50
	C6252		CKSQYB822K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242, C6255		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225, C6241, C6266		CKSQYF473Z50
	C6232		CKSYB273K50
	C6251		CKSYB822K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50

RESISTORS

	VR6201	(10K)	ACP1056
	VR6202		VRTB6VS223
	R6299, R6300		RD1/6PM102J
	R6113, R6116, R6118, R6268−R6271		RS1/8S000J
	R6275, R6276, R6278, R6283, R6284		RS1/8S000J
	R6290, R6293, R6294, R6297		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211		RS1/8S103J
	R6237		RS1/8S182J
	R6209		RS1/8S221J
	R6239		RS1/8S332J
	R6101		RS1/8S470J
	Other Resistors		RS1/10S□□□J

OTHERS

	X6203	(7.200MHZ)	ASS1042
	X6201	(456KHZ)	ASS1066
	X6202	(450KHZ)	ATF1027
	BN6201	2P ANTENNA TERMINAL WITH PAL	AKA1017
		AM RF TUNING BLOCK	AXX1041

FRONT 50W ASSY

SEMICONDUCTORS

	IC7501		UPC4570G2
	Q7507, Q7508		2SA1182
	Q7601		2SA1255
	Q7517, Q7518		2SB1115
	Q7501, Q7502		2SC2240
	Q7505, Q7506		2SC2859
	Q7602, Q7603		2SC3138
	Q7515, Q7516		2SD1615
	D7505, D7506, D7517, D7518		1SS181
	D7503, D7504, D7516		1SS184
	D7535−D7538		1SS226
	D7521−D7524		1SS244
	D7519, D7520, D7525, D7526, D7531		HSS104−02
	D7533		HSS104−02
	D7507−D7510		RD3.3ESB2

CAPACITORS

	C7523, C7524		CEALR10M50
	C7519−C7522, C7545−C7552		CCSQCH101J50
	C7525−C7528		CCSQCH271J50
	C7503, C7504		CCSQCH331J50
	C7541, C7542		CCSQCH470J50
	C7509, C7510		CEAS101M10
	C7602		CEJA221M6R3
	C7540		CEJA3R3M50
	C7539		CEJA4R7M50
	C7699		CKSQYB104K25
	C7529−C7532		CKSQYB333K50
	C7543, C7544		CKSQYB472K50
	C7601, C7603		CKSQYF104Z50
	C7537		CKSQYF473Z50

RESISTORS

	R7519, R7520	(634)	ACN1106
	R7515, R7516	(1.8K)	ACN1107
⚠	R7541, R7542		RD1/4PMF100J
⚠	R7547−R7550		RS1/10S2200F
	R7753		RS1/8S100J
⚠	R7537−R7540		RS1/8S100J
	R7553		RS1/8S101J
⚠	R7543, R7544		RS1/8S1R5J
	Other Resistors		RS1/10S□□□J

REGULATOR ASSY

SEMICONDUCTORS

	IC7201		PAC008
	Q7301, Q7302		2SC1815
	Q7202		2SC2712
	D7204		1SS184
	D7205, D7208		HSS104−02

Mark	No.	Description	Parts No.
	D7210		RB441Q−40
	D7206, D7211		RD4.7ESB
	D7207		RD5.6ESB2

CAPACITORS

	C7402, C7406, C7408	(0.082μF/25V)	ACG1050
	C7204	(1μF/16V)	ACG1051
	C7401, C7405, C7407	(0.33μF/50V)	ACG1053
	C7409	(10μF/35V)	ACH1150
	C7202	(4.7U/35V)	ACH7008
	C7203	(0.33U/50V)	ACH7009
	C7140		CEAS010M50
	C7205		CEJA101M10
	C7201, C7208, C7219		CKSQYB103K50
	C7301		CKSQYB332K50
	C7206, C7215, C7216, C7404, C7698		CKSQYF104Z50

RESISTORS

	VR7201	(22K)	RCP1103
⚠	R7403−R7405	(1.0)	ACN1104
	R7252		RD1/6PM102J
	R7253		RD1/6PM103J
	R7303		RS1/10S1002F
	R7304		RS1/10S8200F
	Other Resistors		RS1/10S☐☐☐J

OTHERS

	CN7101	CONNECTOR (12P)	KPE12

SENSOR BOARD ASSY

SEMICONDUCTORS

	Q601, Q602		PS3062

RESISTORS

	All Resistors		RD1/6PM☐☐☐J

LED BOARD ASSY

SEMICONDUCTORS

	D601, D602		AN306

RESISTORS

	All Resistors		RD1/6PM☐☐☐J

SW BOARD ASSY

SWITCHES AND RELAYS

	S601		DSG1017

MOTOR BOARD ASSY

MOTOR BOARD assy has no service part.

MECHANISM BOARD ASSY

SWITCHES AND RELAYS

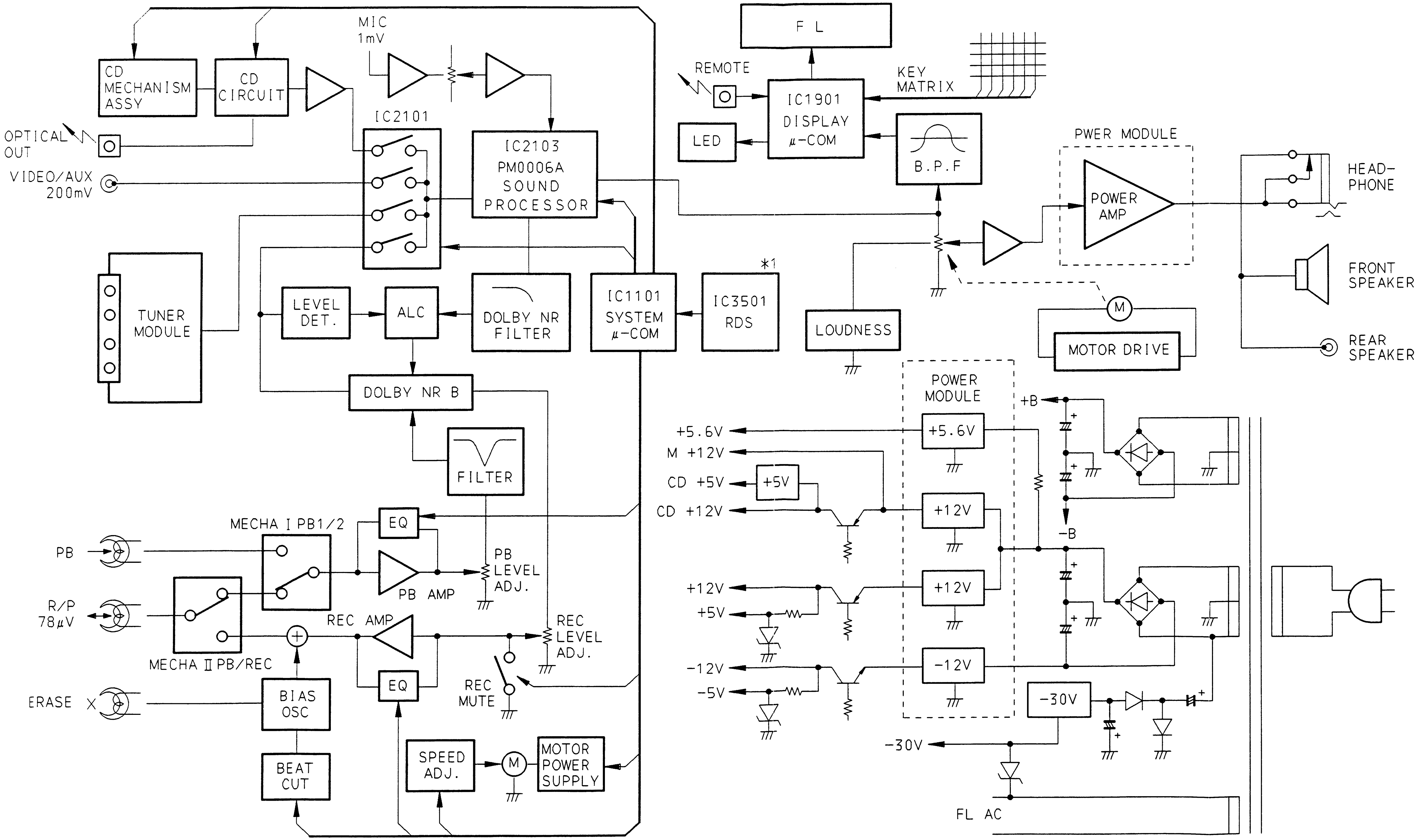
	S610		DSG1016

OTHERS

	CN610	CONNECTOR (4P)	173979−4

7. BLOCK DIAGRAM

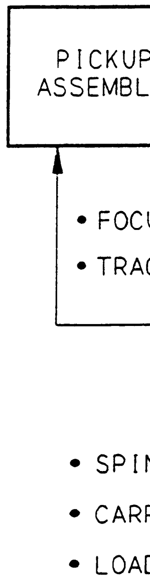
■ AMPLIFIER SECTION



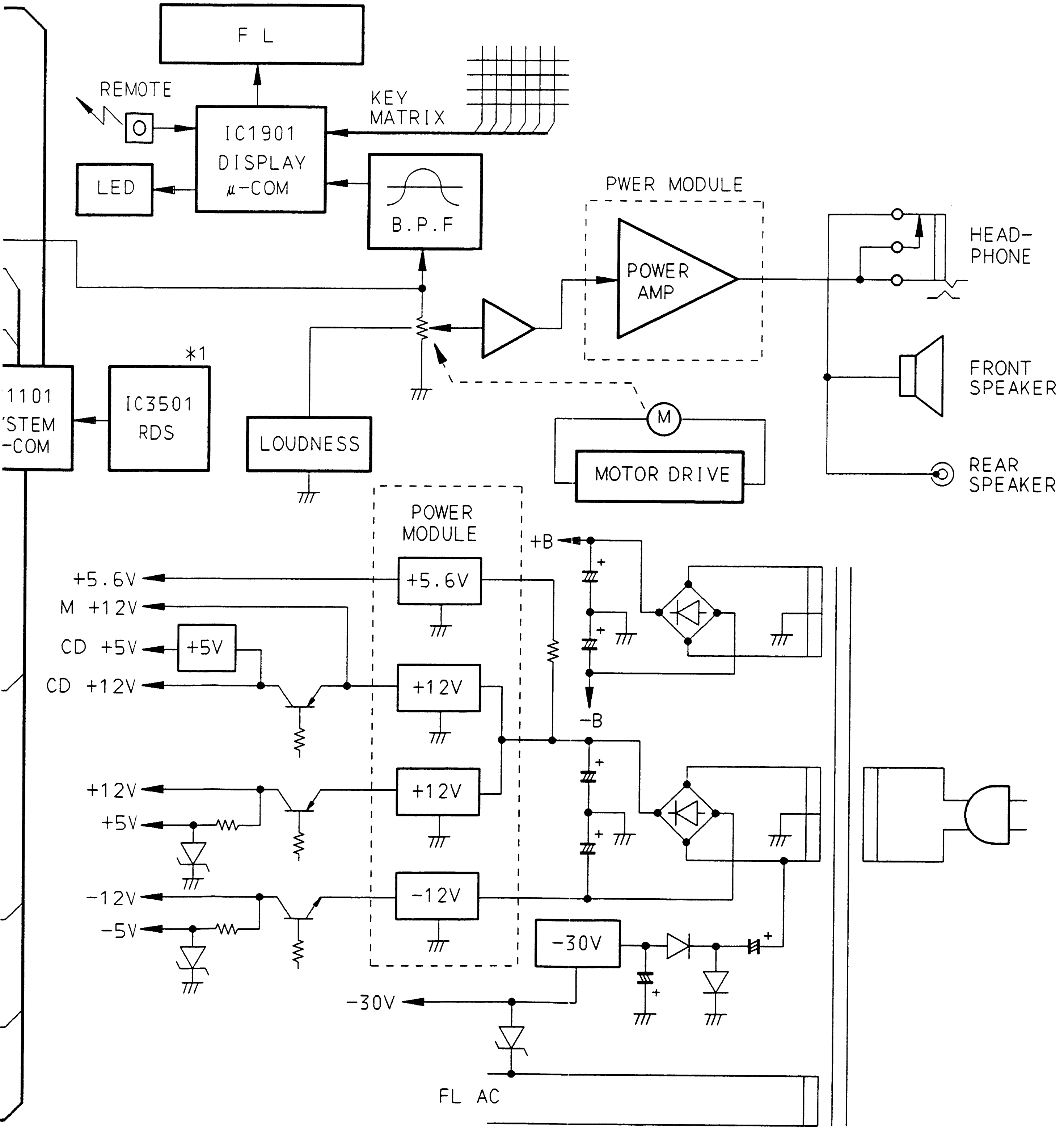
CD MECHANISM ASSY
CD CIRCUIT
OPTICAL OUT
VIDEO/AUX 200mV
MIC 1mV
IC2101
IC2103 PM0006A SOUND PROCESSOR
TUNER MODULE
LEVEL DET.
ALC
DOLBY NR FILTER
IC1101 SYSTEM μ-COM
IC3501 RDS
*1
DOLBY NR B
FILTER
MECHA I PB1/2
EQ
PB
PB AMP
PB LEVEL ADJ.
R/P 78μV
MECHA II PB/REC
REC AMP
REC LEVEL ADJ.
EQ
REC MUTE
ERASE
BIAS OSC
BEAT CUT
SPEED ADJ.
M
MOTOR POWER SUPPLY
F L
REMOTE
IC1901 DISPLAY μ-COM
KEY MATRIX
LED
B.P.F
PWER MODULE
POWER AMP
HEAD-PHONE
FRONT SPEAKER
REAR SPEAKER
LOUDNESS
M
MOTOR DRIVE
POWER MODULE
+5.6V
M +12V
CD +5V
+5V
CD +12V
+5.6V
+12V
+12V
+5V
+12V
-12V
-5V
-12V
+B
-B
-30V
-30V
FL AC

NOTE
*1 : XR-P350/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI ONLY

■ CD SE

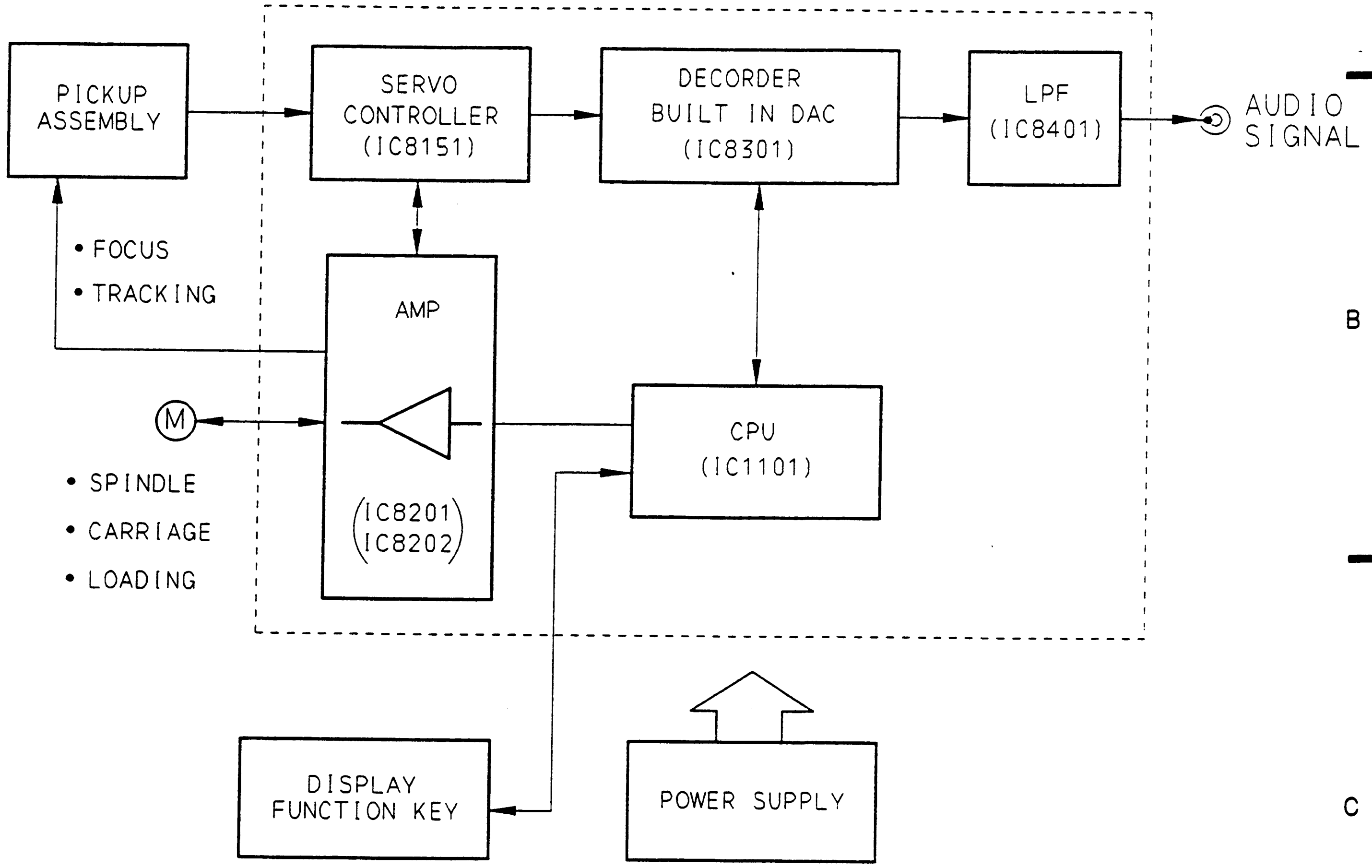


PICKUP ASSEMBL
• FOC
• TRA
• SPI
• CAR
• LOA


F L
REMOTE
KEY MATRIX
IC1901 DISPLAY μ-COM
LED
B.P.F
PWER MODULE
POWER AMP
HEAD-PHONE
FRONT SPEAKER
REAR SPEAKER
*1
1101
'STEM
-COM
IC3501 RDS
LOUDNESS
M
MOTOR DRIVE
POWER MODULE
+B
-B
+5.6V
M +12V
CD +5V
+5V
CD +12V
+12V
+5.6V
+12V
+12V
+5V
-12V
-5V
-12V
-30V
-30V
FL AC

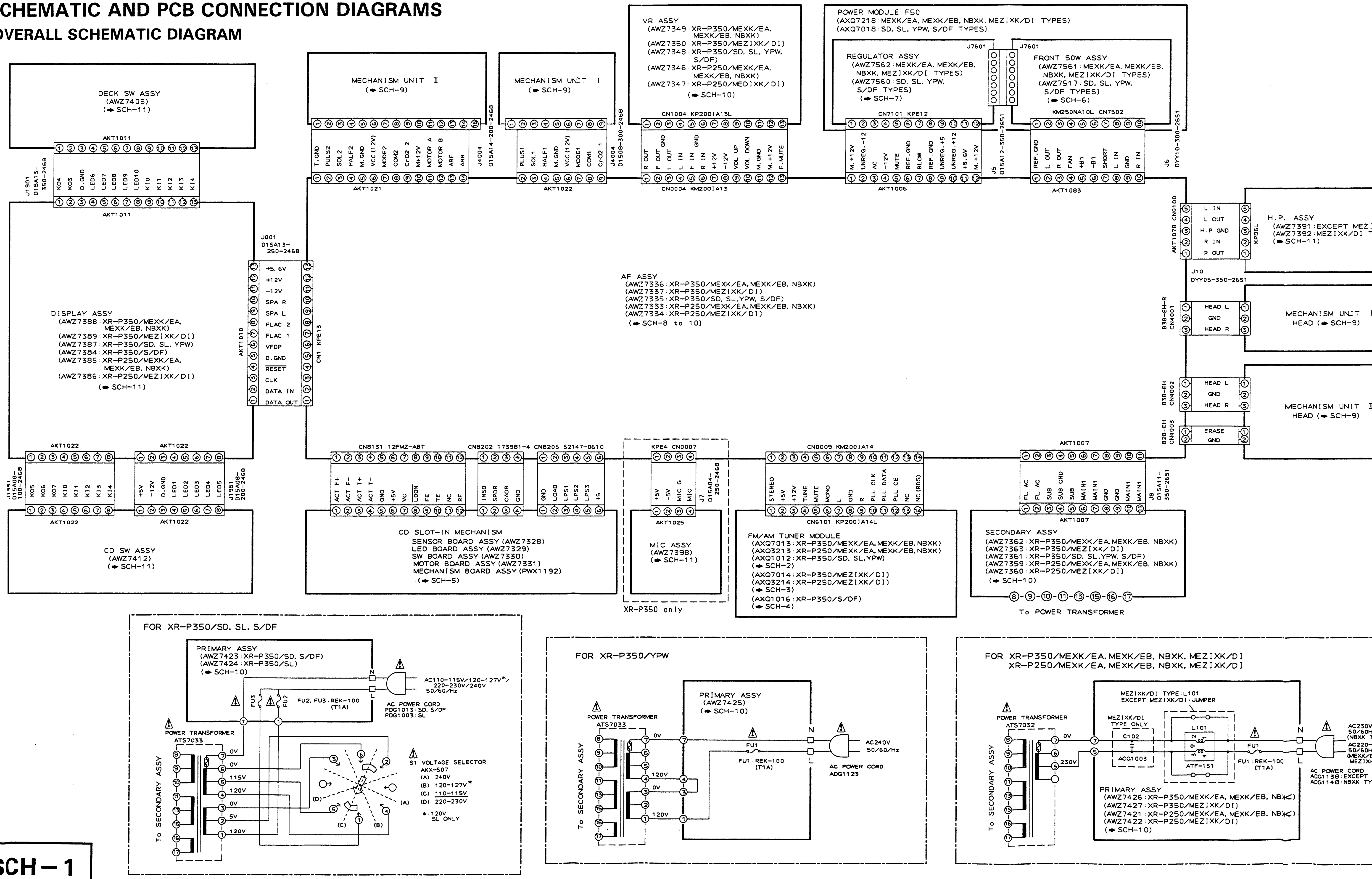
NOTE
*1 : XR-P350/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI ONLY

CD SECTION


PICKUP ASSEMBLY
SERVO CONTROLLER (IC8151)
DECORDER BUILT IN DAC (IC8301)
LPF (IC8401)
AUDIO SIGNAL
• FOCUS
• TRACKING
AMP
M
• SPINDLE
• CARRIAGE
• LOADING
(IC8201 IC8202)
CPU (IC1101)
DISPLAY FUNCTION KEY
POWER SUPPLY

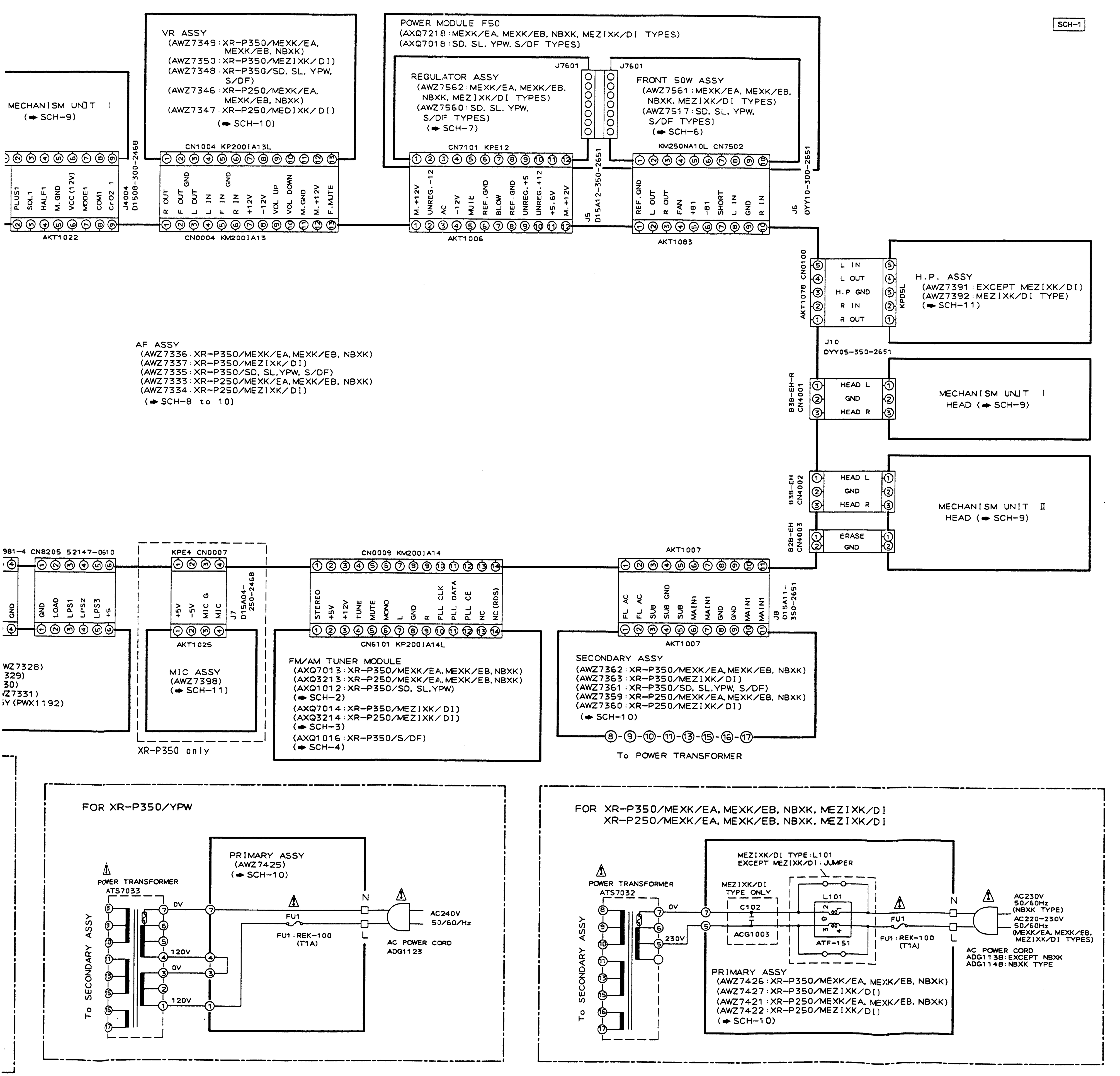
8. SCHEMATIC AND PCB CONNECTION DIAGRAMS

8.1 OVERALL SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
A
B
C
D
DECK SW ASSY
(AWZ7405)
(➡ SCH-11)
AKT1011
J1901 D15A13-350-2468
K04
K03
D.GND
LED6
LED7
LED8
LED9
LED10
K10
K11
K12
K13
K14
DISPLAY ASSY
(AWZ7388 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7389 : XR-P350/MEZIXK/DI)
(AWZ7387 : XR-P350/SD, SL, YPW)
(AWZ7384 : XR-P350/S/DF)
(AWZ7385 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7386 : XR-P250/MEZIXK/DI)
(➡ SCH-11)
J001 D15A13-250-2468
AKT1010
CN1 KPE13
+5, 6V
+12V
−12V
SPA R
SPA L
FLAC 2
FLAC 1
VFDP
D.GND
RESET
CLK
DATA IN
DATA OUT
MECHANISM UNIT Ⅱ
(➡ SCH-9)
T.GND
PULS2
SOL2
HALF2
M.GND
VCC (12V)
MODE2
COM2
CrO2 2
M+12V
MOTOR A
MOTOR B
ARF
ARR
AKT1021
J4004 D15A14-200-2468
MECHANISM UNIT Ⅰ
(➡ SCH-9)
PLUS1
SOL1
HALF1
M.GND
VCC (12V)
MODE1
COM1
CrO2 1
AKT1022
J4004 D1508-300-2468
VR ASSY
(AWZ7349 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7350 : XR-P350/MEZIXK/DI)
(AWZ7348 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7346 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7347 : XR-P250/MEDIXK/DI)
(➡ SCH-10)
CN1004 KP200IA13L
CN0004 KM200IA13
R OUT
GND
F OUT
L OUT
L IN
GND
F IN
R IN
+12V
−12V
VOL UP
VOL DOWN
M.GND
M.+12V
F.MUTE
POWER MODULE F50
(AXQ7218 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AXQ7018 : SD, SL, YPW, S/DF TYPES)
REGULATOR ASSY
(AWZ7562 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7560 : SD, SL, YPW, S/DF TYPES)
(➡ SCH-7)
J7601
CN7101 KPE12
M.+12V
UNREG.−12
AC
−12V
MUTE
REF.GND
BLOW
REF.GND
UNREG.+5
UNREG.+12
+5.6V
M.+12V
AKT1006
J5 D15A12-350-2651
FRONT 50W ASSY
(AWZ7561 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7517 : SD, SL, YPW, S/DF TYPES)
(➡ SCH-6)
KM250NA10L CN7502
REF.GND
L OUT
R OUT
FAN
+B1
−B1
SHORT
L IN
GND
R IN
AKT1083
J6 DYY10-300-2651
AKT1078 CN0100
L IN
L OUT
H.P GND
R IN
R OUT
KPD5L
H.P. ASSY
(AWZ7391 : EXCEPT MEZI
(AWZ7392 : MEZIXK/DI T
(➡ SCH-11)
J10 DYY05-350-2651
AF ASSY
(AWZ7336 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7337 : XR-P350/MEZIXK/DI)
(AWZ7335 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7333 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7334 : XR-P250/MEZIXK/DI)
(➡ SCH-8 to 10)
B3B-EH-R CN4001
HEAD L
GND
HEAD R
MECHANISM UNIT
HEAD (➡ SCH-9)
B3B-EH CN4002
HEAD L
GND
HEAD R
MECHANISM UNIT Ⅱ
HEAD (➡ SCH-9)
B2B-EH CN4003
ERASE
GND
AKT1022
J1351 D15A08-100-2468
K05
K06
K07
K10
K11
K12
K13
K14
AKT1022
+5V
−12V
D.GND
LED1
LED2
LED3
LED4
LED5
J1351 D15A08-200-2468
CD SW ASSY
(AWZ7412)
(➡ SCH-11)
CN8131 12FMZ-ABT
ACT F+
ACT F−
ACT T+
ACT T−
GND
+5V
VC
LDON
FE
TE
NC
RF
CN8202 173981-4
INSD
SPDR
CADR
GND
CN8205 52147-0610
GND
LOAD
LPS1
LPS2
LPS3
+5
CD SLOT-IN MECHANISM
SENSOR BOARD ASSY (AWZ7328)
LED BOARD ASSY (AWZ7329)
SW BOARD ASSY (AWZ7330)
MOTOR BOARD ASSY (AWZ7331)
MECHANISM BOARD ASSY (PWX1192)
(➡ SCH-5)
KPE4 CN0007
+5V
−5V
MIC G
MIC
J7 D15A04-250-2468
AKT1025
MIC ASSY
(AWZ7398)
(➡ SCH-11)
XR-P350 only
CN0009 KM200IA14
STEREO
+5V
+12V
TUNE
MUTE
MONO
L
GND
R
PLL CLK
PLL DATA
PLL CE
NC
NC (RDS)
CN6101 KP200IA14L
FM/AM TUNER MODULE
(AXQ7013 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AXQ3213 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AXQ1012 : XR-P350/SD, SL, YPW)
(➡ SCH-2)
(AXQ7014 : XR-P350/MEZIXK/DI)
(AXQ3214 : XR-P250/MEZIXK/DI)
(➡ SCH-3)
(AXQ1016 : XR-P350/S/DF)
(➡ SCH-4)
AKT1007
FL AC
FL AC
SUB
SUB GND
SUB
MAIN1
MAIN1
GND
GND
MAIN1
MAIN1
J8 D15A11-350-2651
SECONDARY ASSY
(AWZ7362 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7363 : XR-P350/MEZIXK/DI)
(AWZ7361 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7359 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7360 : XR-P250/MEZIXK/DI)
(➡ SCH-10)
⑧-⑨-⑩-⑪-⑬-⑮-⑯-⑰
To POWER TRANSFORMER
FOR XR-P350/SD, SL, S/DF
PRIMARY ASSY
(AWZ7423 : XR-P350/SD, S/DF)
(AWZ7424 : XR-P350/SL)
(➡ SCH-10)
FU3
FU2
FU2, FU3 : REK-100 (T1A)
AC110-115V/120-127V*/220-230V/240V 50/60Hz
AC POWER CORD
PDG1013 : SD, S/DF
PDG1003 : SL
POWER TRANSFORMER
ATS7033
To SECONDARY ASSY
0V
0V
115V
120V
0V
5V
120V
S1 VOLTAGE SELECTOR
AKX-507
(A) 240V
(B) 120-127V*
(C) 110-115V
(D) 220-230V
* 120V SL ONLY
FOR XR-P350/YPW
POWER TRANSFORMER
ATS7033
PRIMARY ASSY
(AWZ7425)
(➡ SCH-10)
0V
120V
0V
120V
FU1
FU1 : REK-100 (T1A)
AC240V 50/60Hz
AC POWER CORD
ADG1123
FOR XR-P350/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI
XR-P250/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI
POWER TRANSFORMER
ATS7032
MEZIXK/DI TYPE : L101
EXCEPT MEZIXK/DI : JUMPER
MEZIXK/DI TYPE ONLY
C102
ACG1003
L101
ATF-151
0V
230V
FU1
FU1 : REK-100 (T1A)
AC230V 50/60H
(NBXK
AC220-
50/60H
(MEXK/E
MEZIXK
AC POWER CORD
ADG1138 : EXCEPT
ADG1148 : NBXK TY
PRIMARY ASSY
(AWZ7426 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7427 : XR-P350/MEZIXK/DI)
(AWZ7421 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7422 : XR-P250/MEZIXK/DI)
(➡ SCH-10)
N
L

SCH−1

OVERALL SCHEMATIC DIAGRAM


MECHANISM UNIT I (➡ SCH-9)
AKT1022
J4004 D1508-300-2468
PLUS1 SOL1 HALF1 M.GND VCC(12V) MODE1 COM1 Cr02 1
VR ASSY
(AWZ7349 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7350 : XR-P350/MEZIXK/DI)
(AWZ7348 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7346 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7347 : XR-P250/MEDIXK/DI)
(➡ SCH-10)
CN1004 KP2001A13L
CN0004 KM2001A13
R OUT F OUT GND L OUT L IN F IN GND R IN +12V -12V VOL UP VOL DOWN M.GND M.+12V F.MUTE
POWER MODULE F50
(AXQ7218 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AXQ7018 : SD, SL, YPW, S/DF TYPES)
J7601
REGULATOR ASSY
(AWZ7562 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7560 : SD, SL, YPW, S/DF TYPES)
(➡ SCH-7)
FRONT 50W ASSY
(AWZ7561 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7517 : SD, SL, YPW, S/DF TYPES)
(➡ SCH-6)
CN7101 KPE12
M.+12V UNREG.-12 AC -12V MUTE REF.GND BLOW REF.GND UNREG.+5 UNREG.+12 +5.6V M.+12V
AKT1006
J5 D15A12-350-2651
KM250NA10L CN7502
REF.GND L OUT R OUT FAN +B1 -B1 SHORT L IN GND R IN
AKT1083
J6 DYY10-300-2651
AKT1078 CN0100
L IN L OUT H.P GND R IN R OUT
KPD5L
H.P. ASSY
(AWZ7391 : EXCEPT MEZIXK/DI)
(AWZ7392 : MEZIXK/DI TYPE)
(➡ SCH-11)
J10 DYY05-350-2651
AF ASSY
(AWZ7336 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7337 : XR-P350/MEZIXK/DI)
(AWZ7335 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7333 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7334 : XR-P250/MEZIXK/DI)
(➡ SCH-8 to 10)
B3B-EH-R CN4001
HEAD L GND HEAD R
MECHANISM UNIT I HEAD (➡ SCH-9)
B3B-EH CN4002
HEAD L GND HEAD R
MECHANISM UNIT II HEAD (➡ SCH-9)
B2B-EH CN4003
ERASE GND
981-4 CN8205 52147-0610
GND LOAD LPS1 LPS2 LPS3 +5
WZ7328) 329) 30) Z7331) Y (PWX1192)
KPE4 CN0007
+5V -5V MIC G MIC
J7 D15A04-250-2468
AKT1025
MIC ASSY (AWZ7398) (➡ SCH-11)
XR-P350 only
CN0009 KM2001A14
STEREO +5V +12V TUNE MUTE MONO L GND R PLL CLK PLL DATA PLL CE NC NC(RDS)
CN6101 KP2001A14L
FM/AM TUNER MODULE
(AXQ7013 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AXQ3213 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AXQ1012 : XR-P350/SD, SL, YPW)
(➡ SCH-2)
(AXQ7014 : XR-P350/MEZIXK/DI)
(AXQ3214 : XR-P250/MEZIXK/DI)
(➡ SCH-3)
(AXQ1016 : XR-P350/S/DF)
(➡ SCH-4)
AKT1007
FL AC FL AC SUB SUB GND SUB MAIN1 MAIN1 GND GND MAIN1 MAIN1
J8 D15A11-350-2651
SECONDARY ASSY
(AWZ7362 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7363 : XR-P350/MEZIXK/DI)
(AWZ7361 : XR-P350/SD, SL, YPW, S/DF)
(AWZ7359 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7360 : XR-P250/MEZIXK/DI)
(➡ SCH-10)
To POWER TRANSFORMER
FOR XR-P350/YPW
POWER TRANSFORMER ATS7033
To SECONDARY ASSY
0V 120V 0V 120V
PRIMARY ASSY (AWZ7425) (➡ SCH-10)
FU1 FU1 : REK-100 (T1A)
N L
AC240V 50/60Hz
AC POWER CORD ADG1123
FOR XR-P350/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI
XR-P250/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI
POWER TRANSFORMER ATS7032
0V 230V
MEZIXK/DI TYPE : L101
EXCEPT MEZIXK/DI : JUMPER
MEZIXK/DI TYPE ONLY
C102 ACG1003
L101 ATF-151
FU1 FU1 : REK-100 (T1A)
AC230V 50/60Hz (NBXK TYPE)
AC220-230V 50/60Hz (MEXK/EA, MEXK/EB, MEZIXK/DI TYPES)
AC POWER CORD
ADG1138 : EXCEPT NBXK
ADG1148 : NBXK TYPE
PRIMARY ASSY
(AWZ7426 : XR-P350/MEXK/EA, MEXK/EB, NBXK)
(AWZ7427 : XR-P350/MEZIXK/DI)
(AWZ7421 : XR-P250/MEXK/EA, MEXK/EB, NBXK)
(AWZ7422 : XR-P250/MEZIXK/DI)
(➡ SCH-10)

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭V : Signal voltage at rated output.
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH-□ ON THE SCHEMATIC DIAGRAM:**
   - SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

SW BOARD ASSY

S601	CLAMP SW (DISC POSITION DET.)

DISPLAY ASSY

S1801	AM
S1802	SFC/KARAOKE
S1803	–
S1804	POWER ON/OFF
S1805	VIDEO (VIDEO/AUX)
S1806	FM
S1807	+

DECK SW ASSY

S1809	I ▭ II
S1810	◀◀
S1811	◀
S1812	▶
S1813	ASES
S1814	DOLBY NR ON/OFF
S1815	▶▶
S1816	■
S1817	COPY
S1818	REC

CD SW ASSY

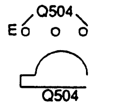
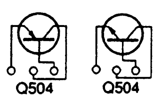
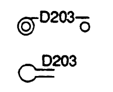
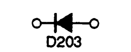
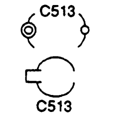
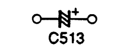
S1819	▶▶▎
S1820	▶/❚❚
S1821	P.BASS
S1822	MONO
S1823	FREQ/STATION
S1824	▎◀◀
S1825	■
S1826	SURROUND & STEREO WIDE
S1827	MEMORY
S1828	DISPLAY
S1829	PROGRAM
S1830	RANDOM
S1831	⏏
S1832	TIMER REC WAKE-UP
S1833	CLOCK/CLOCK ADJ.

MECHANISM BOARD ASSY

S610	INSIDE SW

NOTE FOR PCB DIAGRAMS:

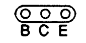
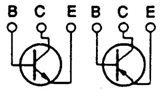
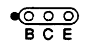
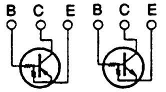
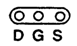
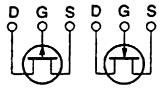
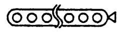
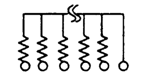
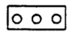
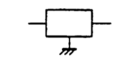
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

OVERALL SCHEMATIC DIAGRAM

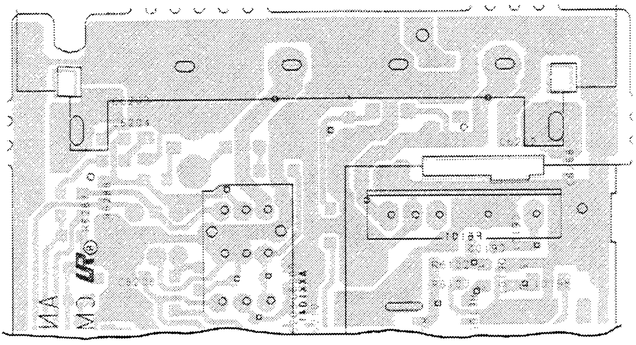
SCH-1

8.2 FM/AM TUNER MODULE

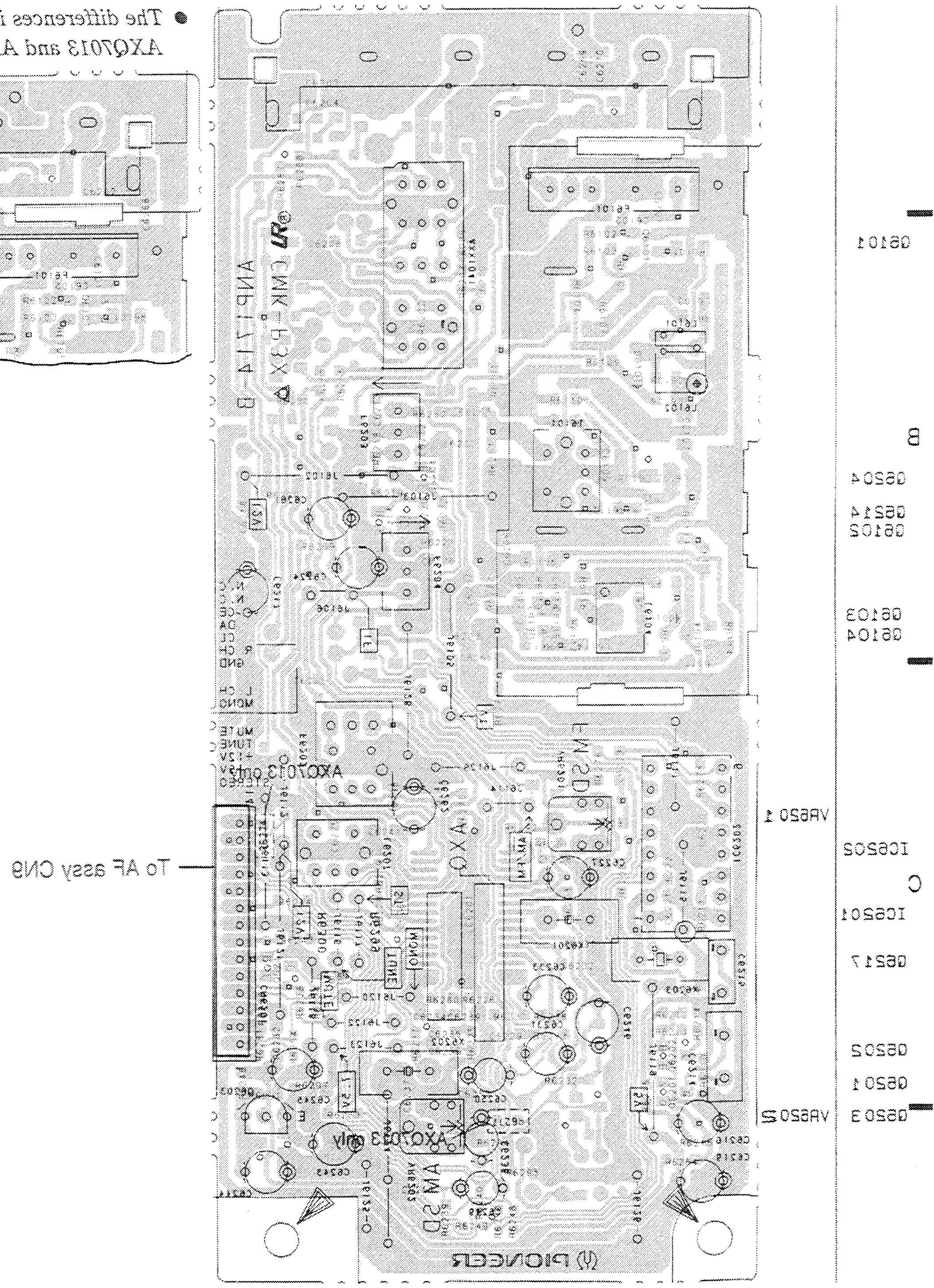
● For XR-P350/MEXK/EA, MEXK/EB and NBXK types (AXQ7013)
XR-P250/MEXK/EA, MEXK/EB and NBXK types (AXQ3213)
XR-P350/SD, SL and YPW types (AXQ1012)

FM/AM TUNER MODULE (AXQ1012)

● The differences in the PCB diagram between AXQ7013 and AXQ1012 are as follows.


AN
CM
AXX1041
F6101

FM/AM TUNER MODULE
(AXQ7013 and AXQ3213)


ANP1714-B
CMX-P37X
AXQ7013 only
AM SD
FM SD
PIONEER
MUTE
TUNE
+12V
STEREO
L CH
MONO
R CH
GND
Q6101
Q6204
Q6214
Q6102
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
VR6202
Q6203

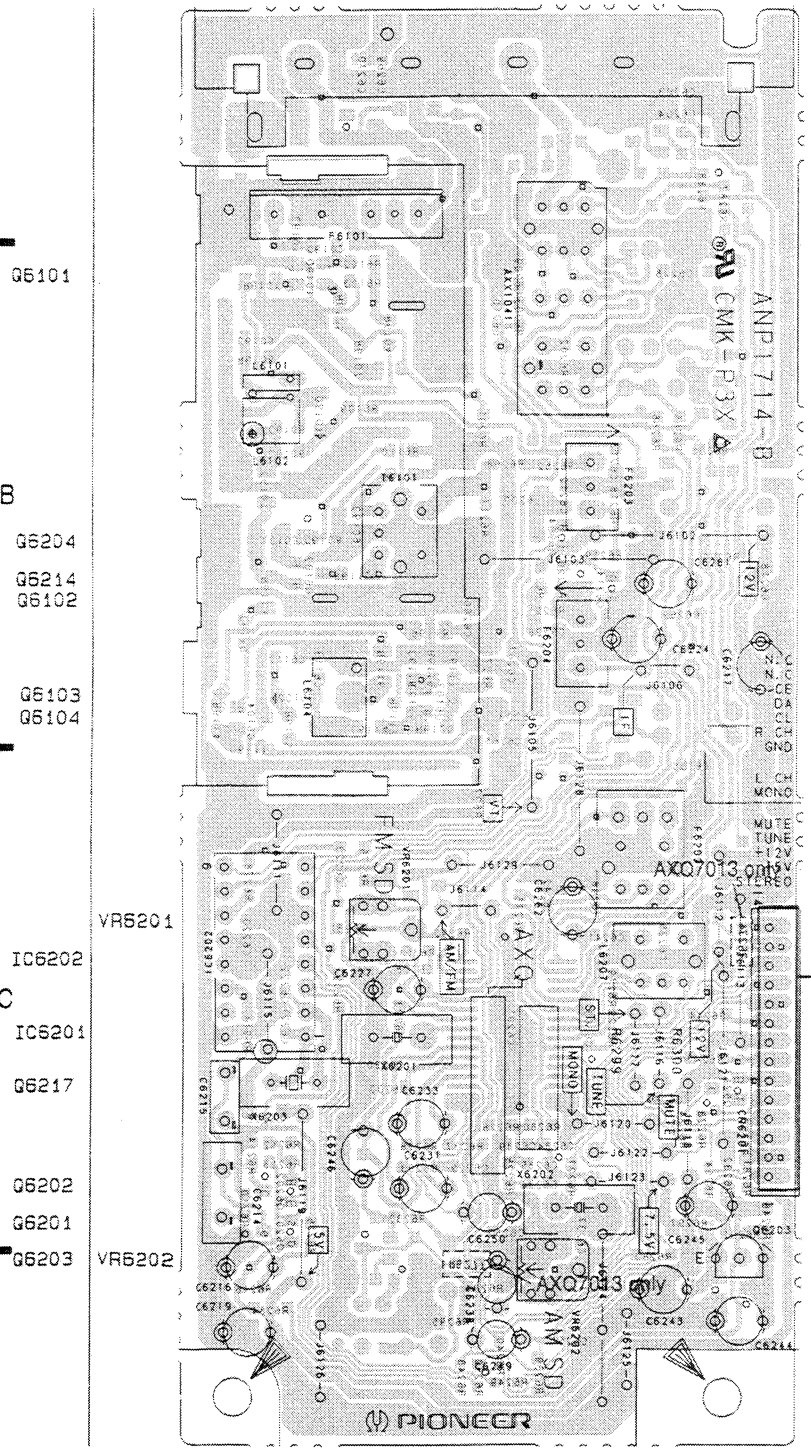
To AF assy CN9

● This diagram is viewed from the foil side.

8.2 FM/AM TUNER MODULE

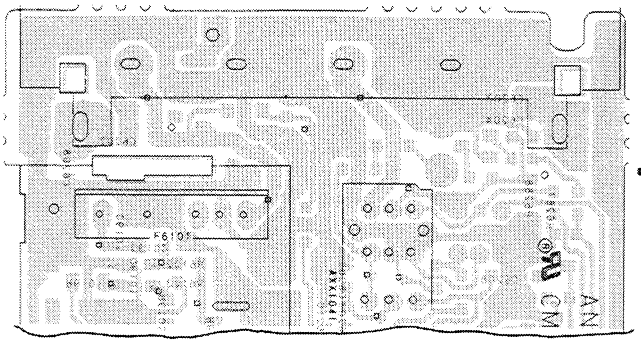
- **For XR−P350/MEXK/EA, MEXK/EB and NBXK types (AXQ7013)**
  XR−P250/MEXK/EA, MEXK/EB and NBXK types (AXQ3213)
  XR−P350/SD, SL and YPW types (AXQ1012)

FM/AM TUNER MODULE
(AXQ7013 and AXQ3213)

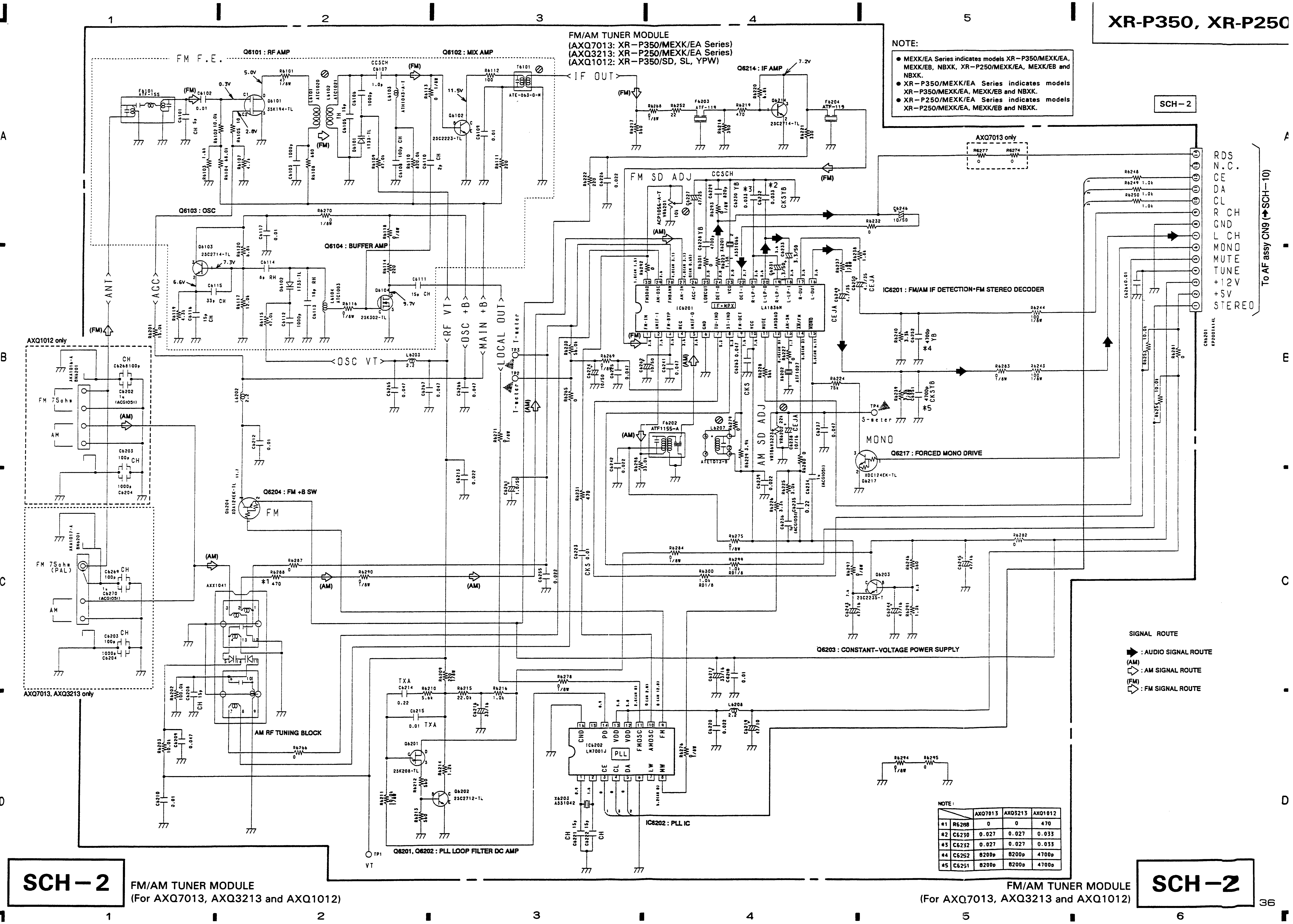

Q6101
Q6204
Q6214
Q6102
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202
F6101
L6101
L6102
T6101
AXX1041
ANP1714-B
CMK-P3X
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
AXQ7013 only
FM SD
AM/FM
ST
MONO
TUNE
MUTE
12V
5V
AXQ7013 only
AM SD
PIONEER
To AF assy CN9

FM/AM TUNER MODULE (AXQ1012)

- *The differences in the PCB diagram between AXQ7013 and AXQ1012 are as follows.*


F6101
AXX1041
AN
CM

- This diagram is viewed from the mounted parts side.


FM/AM TUNER MODULE
(AXQ7013: XR-P350/MEXK/EA Series)
(AXQ3213: XR-P250/MEXK/EA Series)
(AXQ1012: XR-P350/SD, SL, YPW)
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
Q6103 : OSC
Q6104 : BUFFER AMP
Q6214 : IF AMP
IF OUT
ANT
AGC
RF VT
OSC +B
MAIN +B
LOCAL OUT
OSC VT
FM SD ADJ
AM SD ADJ
IC6201 : FM/AM IF DETECTION·FM STEREO DECODER
LA1836M
AXQ7013 only
AXQ1012 only
AXQ7013, AXQ3213 only
FM 75ohm
FM 75ohm (PAL)
AM
Q6204 : FM +B SW
AM RF TUNING BLOCK
Q6201, Q6202 : PLL LOOP FILTER DC AMP
IC6202 : PLL IC
LM7001J
PLL
Q6203 : CONSTANT-VOLTAGE POWER SUPPLY
Q6217 : FORCED MONO DRIVE
MONO
S-meter
T-meter
VT
RDS
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To AF assy CN9 (→SCH-10)
SCH-2
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(AM) : AM SIGNAL ROUTE
(FM) : FM SIGNAL ROUTE
1
2
3
4
5
6
A
B
C
D

NOTE:

- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.

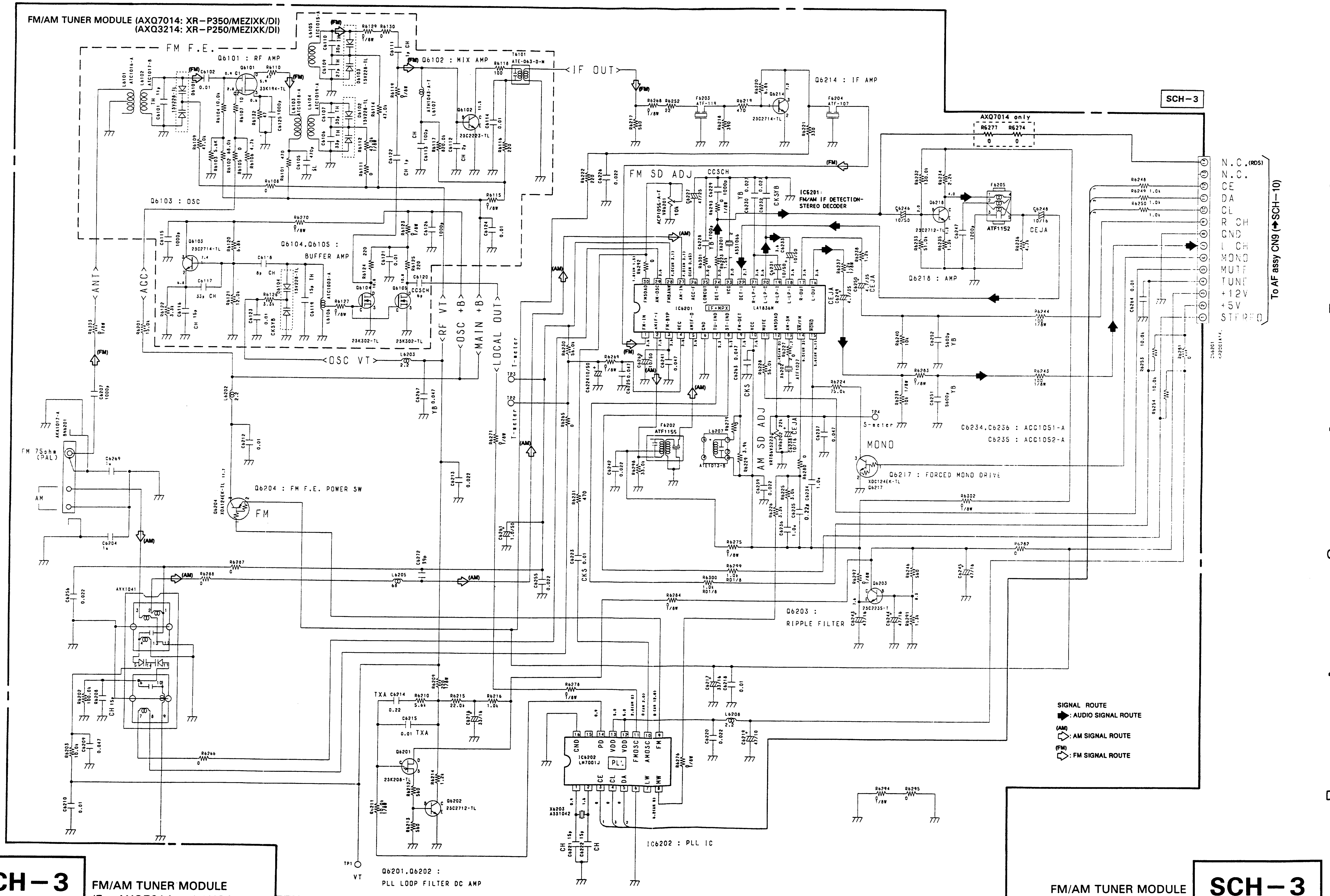
NOTE :

		AXQ7013	AXQ3213	AXQ1012
*1	R6288	0	0	470
*2	C6230	0.027	0.027	0.033
*3	C6232	0.027	0.027	0.033
*4	C6252	8200p	8200p	4700p
*5	C6251	8200p	8200p	4700p

SCH−2 FM/AM TUNER MODULE
(For AXQ7013, AXQ3213 and AXQ1012)

FM/AM TUNER MODULE **SCH−2**
(For AXQ7013, AXQ3213 and AXQ1012)

- For XR−P350/MEZIXK/DI (AXQ7014)
  XR−P250/MEZIXK/DI (AXQ3214)


FM/AM TUNER MODULE (AXQ7014: XR−P350/MEZIXK/DI)
(AXQ3214: XR−P250/MEZIXK/DI)
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
<IF OUT>
Q6214 : IF AMP
Q6103 : OSC
Q6104, Q6105 : BUFFER AMP
<ANT>
<AGC>
<RF VT>
<OSC +B>
<MAIN +B>
<LOCAL OUT>
<OSC VT>
FM SD ADJ
CCSCH
IC6201 : FM/AM IF DETECTION·STEREO DECODER
IC6201 LA1836M
IF+MPX
AXQ7014 only
R6277 R6274
Q6218 : AMP
ATF1152
CEJA
SCH−3
N.C. (RDS)
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To AF assy CN9 (→SCH−10)
F6202 ATF1155
L6207
AM SD ADJ
S-meter
T-meter
MONO
Q6217 : FORCED MONO DRIVE
C6234, C6236 : ACG1051-A
C6235 : ACG1052-A
FM 75ohm (PAL)
AM
Q6204 : FM F.E. POWER SW
FM
AXK1041
Q6203 : RIPPLE FILTER
TXA
IC6202 LM7001J
PLL
IC6202 : PLL IC
Q6201
Q6202
TP1
VT
Q6201, Q6202 : PLL LOOP FILTER DC AMP
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(AM): AM SIGNAL ROUTE
(FM): FM SIGNAL ROUTE

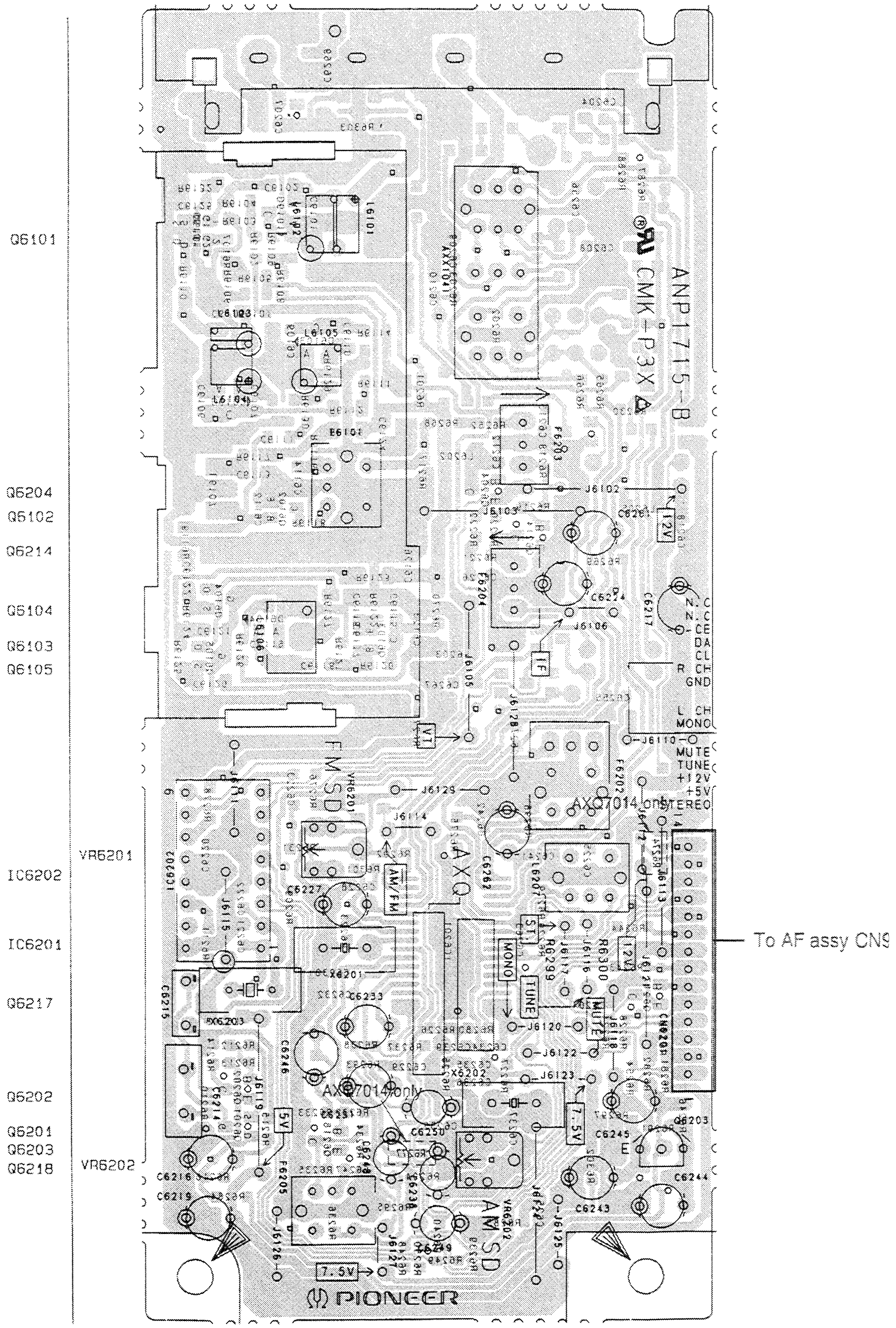
SCH−3

FM/AM TUNER MODULE
(For AXQ7014 and AXQ3214)

SCH−3

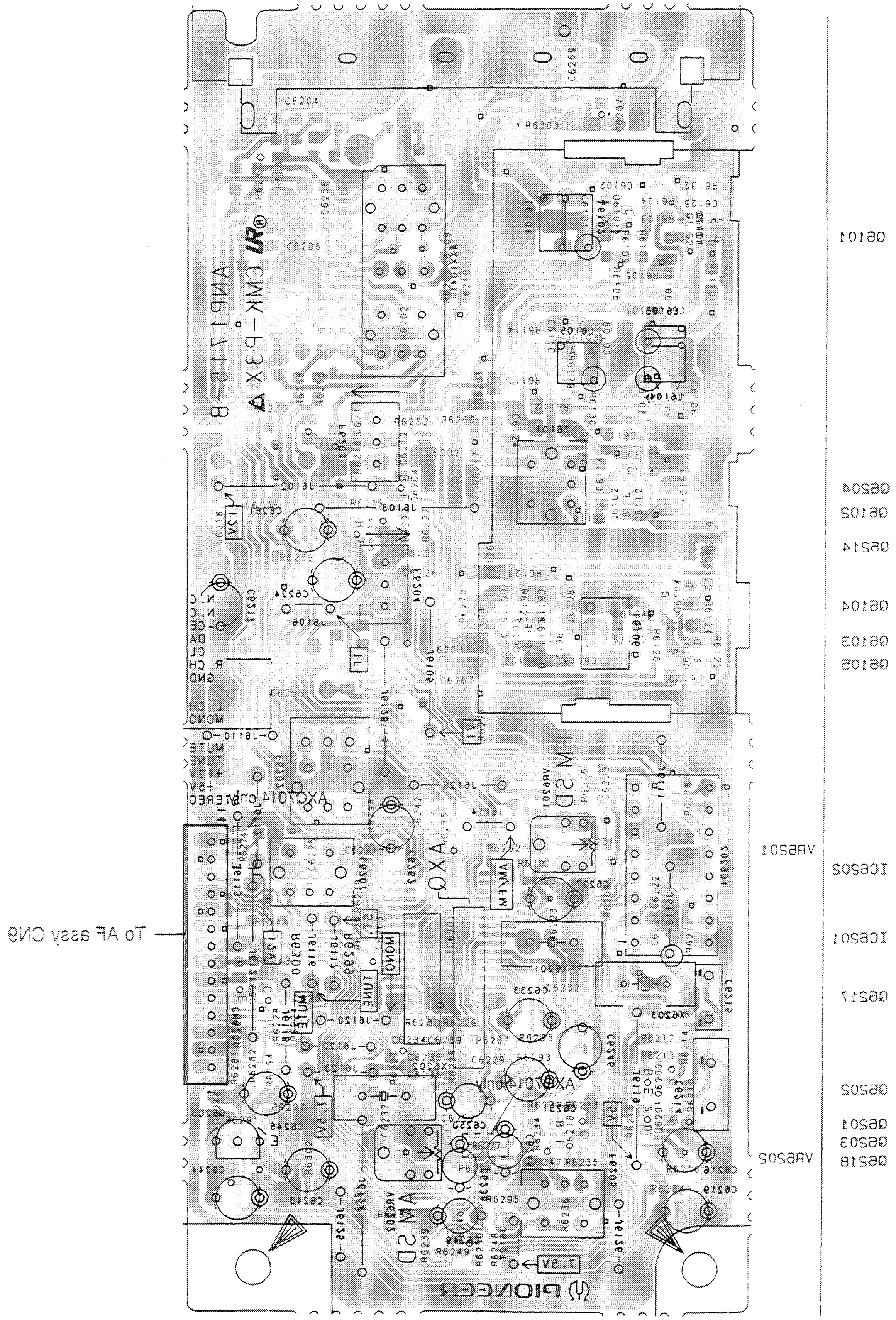
FM/AM TUNER MODULE
(For AXQ7014 and AXQ3214)

FM/AM TUNER MODULE (AXQ7014 and AXQ3214)


A
B
C
D
Q6101
Q6204
Q6102
Q6214
Q6104
Q6103
Q6105
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
Q6218
VR6202
ANP1715-B
CMK-P3X
12V
IF
VT
FM SD
AXQ
AXQ7014 only
AM/FM
ST
MONO
TUNE
MUTE
12V
7.5V
5V
7.5V
AM SD
PIONEER
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To AF assy CN9

- This diagram is viewed from the mounted parts side.

FM/AM TUNER MODULE (AXO7014 and AXO3214)

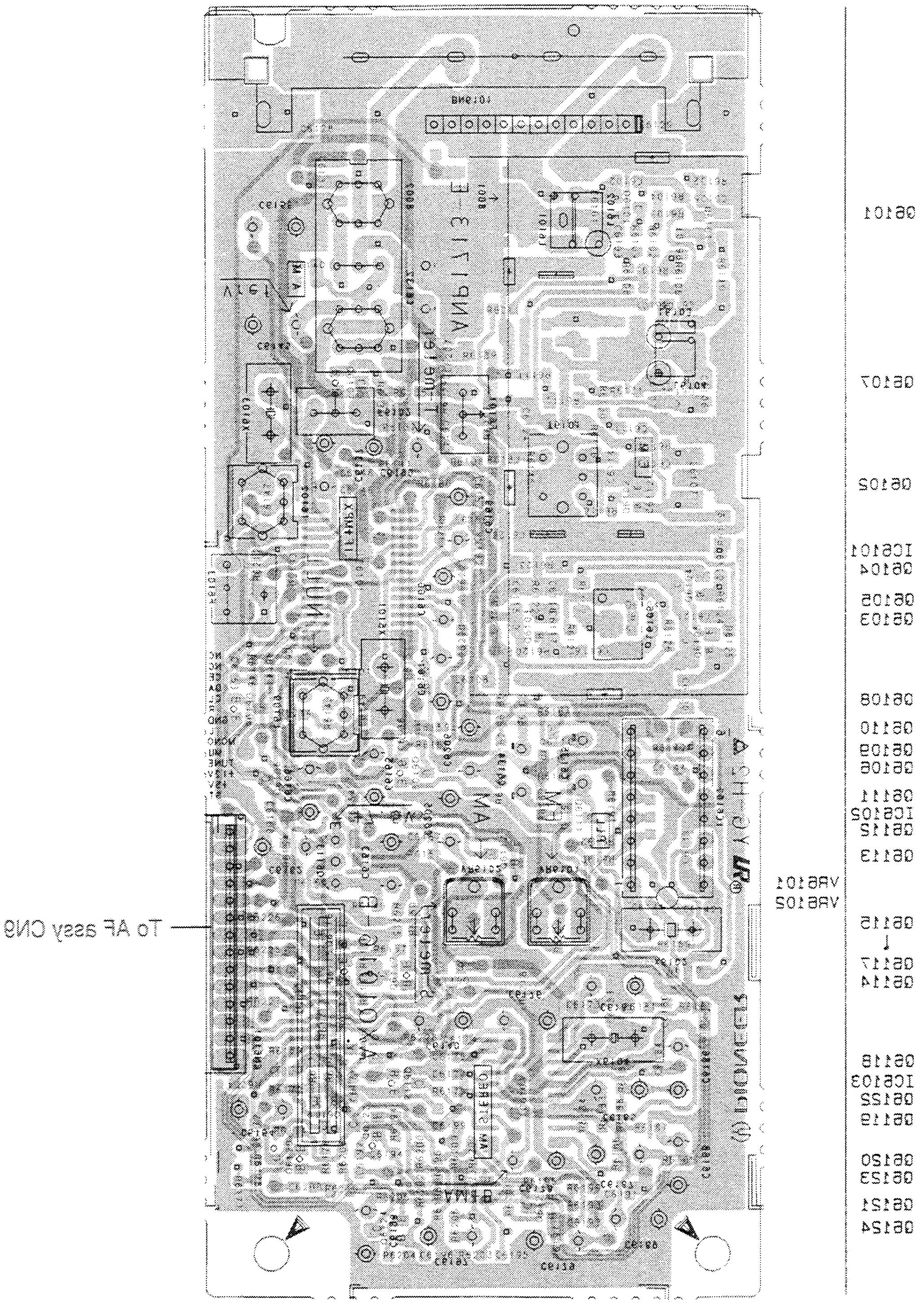

To AF assy CN9
ANP1715-B
AXX-P3 CMK
PIONEER
FM SD
AM SD
AXO7014 only
MUTE
TUNE
+12V
+5V
STEREO
N.C
CE
DA
CL
R CH
GND
L CH
MONO
Q6101
Q6204
Q6102
Q6214
Q6104
Q6103
Q6105
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
Q6218
VR6202

- This diagram is viewed from the foil side.

PCB-3

● For XR-P350/S/DF type (AXQ1016)

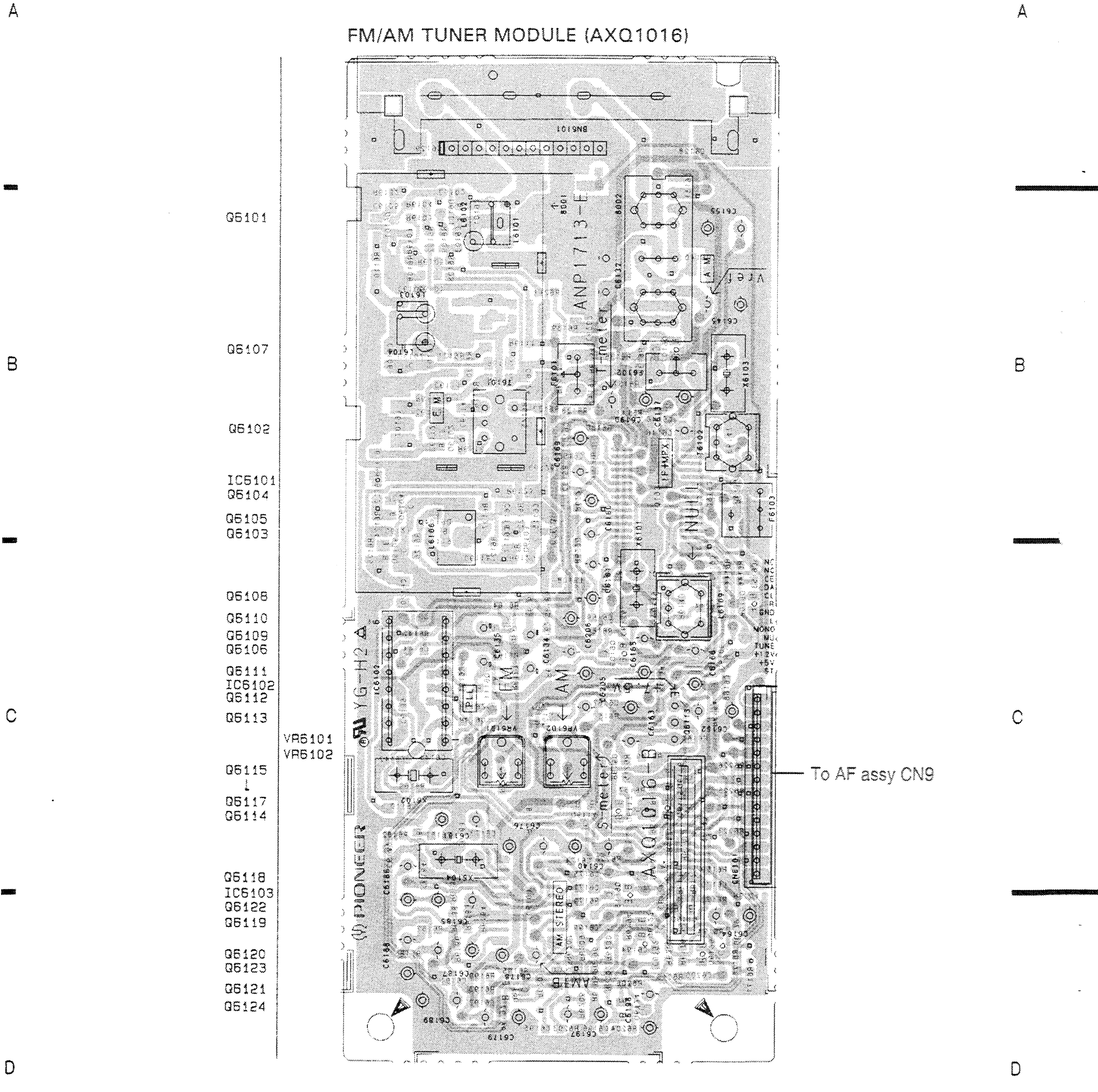
FM/AM TUNER MODULE (AXQ1016)


To AF assy CN9
Q6101
Q6107
Q6102
IC6101
Q6104
Q6105
Q6103
Q6108
Q6110
Q6109
Q6106
Q6111
IC6102
Q6112
Q6113
VR6101
VR6102
Q6115
↓
Q6117
Q6114
Q6118
IC6103
Q6122
Q6119
Q6120
Q6123
Q6121
Q6124
PIONEER
ANP1713-E

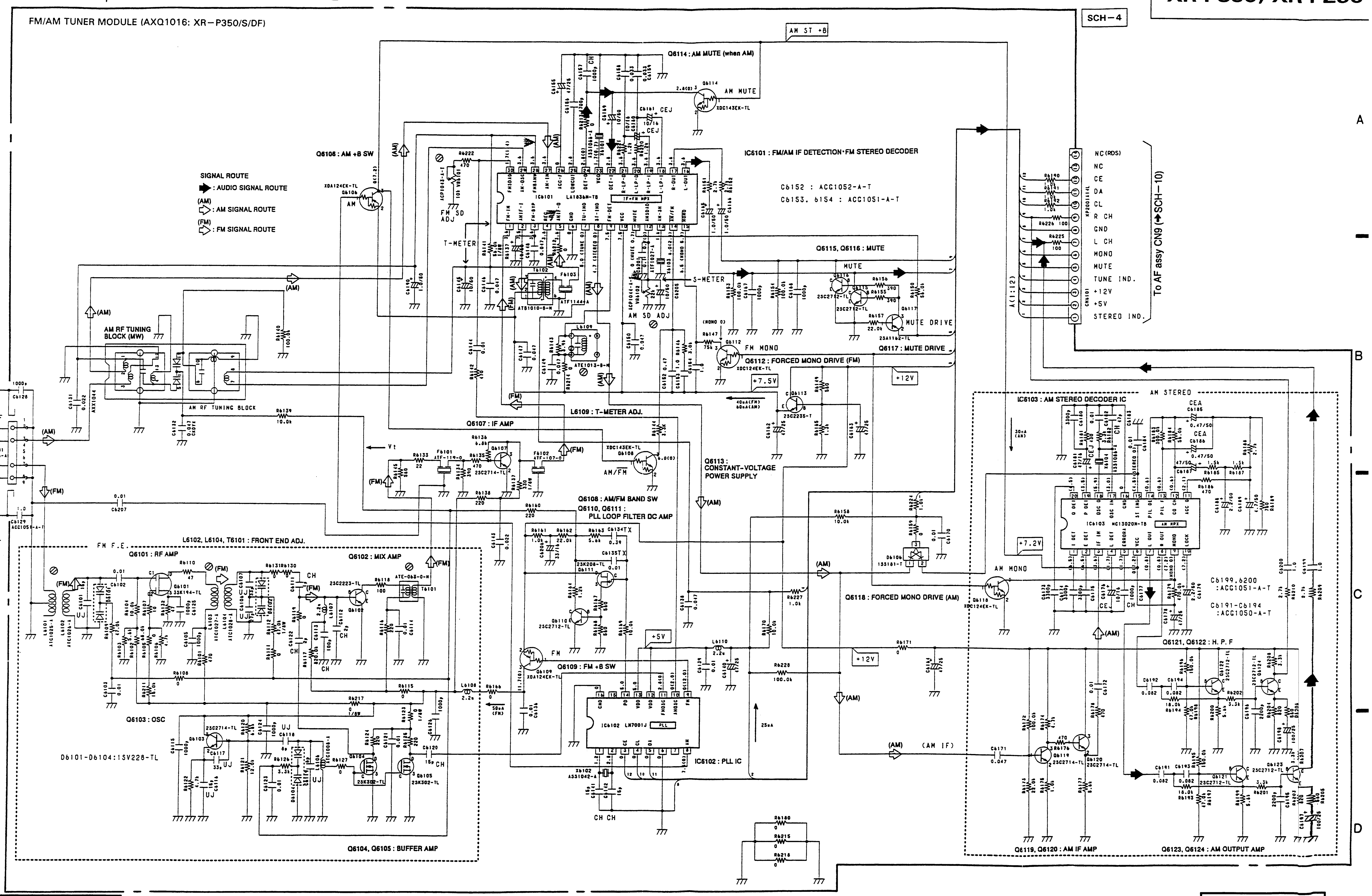
- This diagram is viewed from the gray colored foil side.
- This PCB is double sided.

● **For XR−P350/S/DF type (AXQ1016)**

FM/AM TUNER MODULE (AXQ1016)

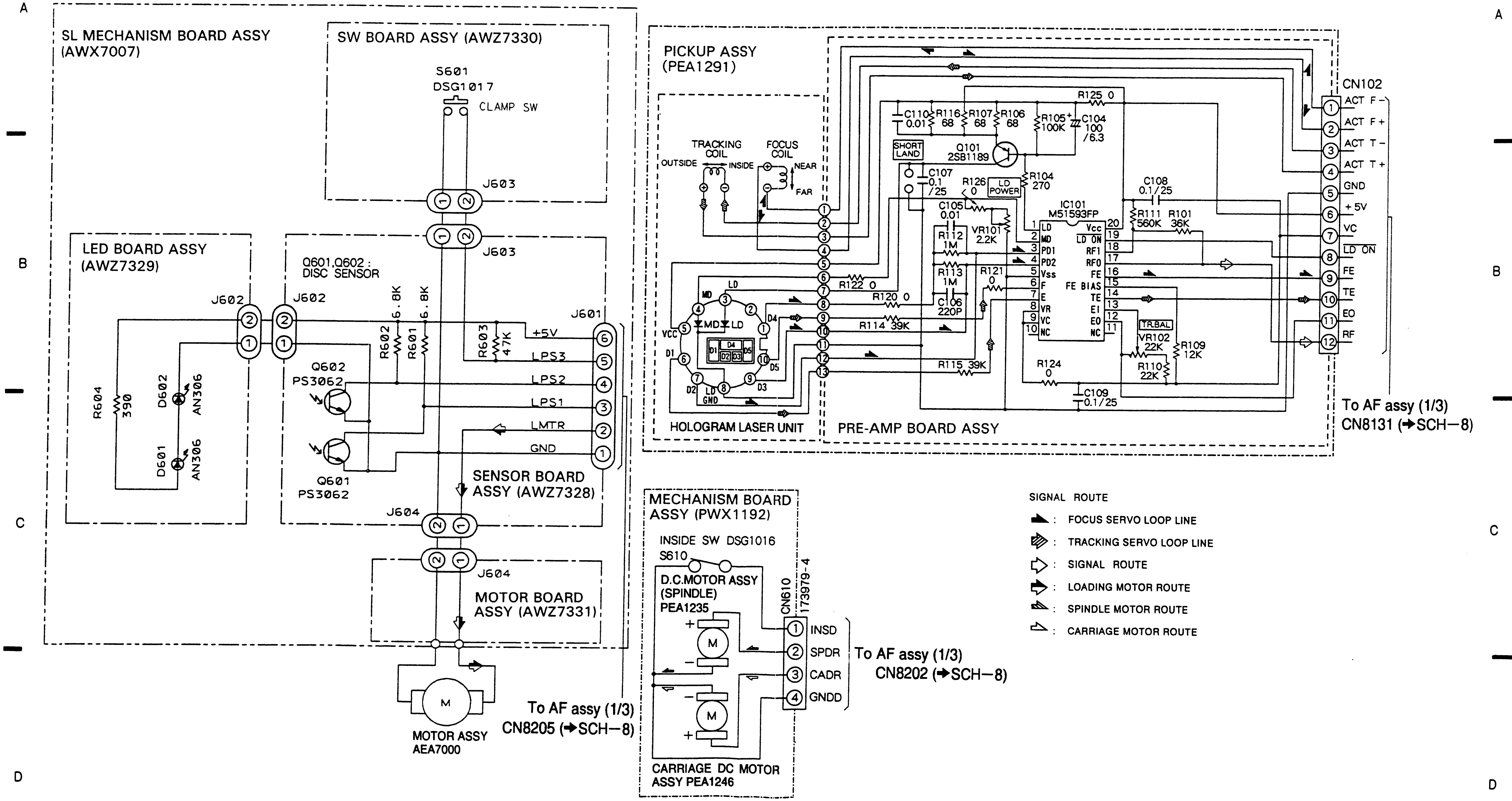

A
Q6101
Q6107
B
Q6102
IC6101
Q6104
Q6105
Q6103
Q6108
Q6110
Q6109
Q6106
Q6111
IC6102
Q6112
C
Q6113
VR6101
VR6102
Q6115
Q6117
Q6114
Q6118
IC6103
Q6122
Q6119
Q6120
Q6123
Q6121
Q6124
D
ANP1713-E
T-meter
S-meter
AXQ1016-B
PIONEER
FM
AM
AM STEREO
PLL
IF+MPX
NULL
Vref
To AF assy CN9

- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.


FM/AM TUNER MODULE (AXQ1016: XR-P350/S/DF)
AM ST +B
Q6114 : AM MUTE (when AM)
AM MUTE
XDC143EK-TL
Q6106 : AM +B SW
XDA124EK-TL
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(AM)
: AM SIGNAL ROUTE
(FM)
: FM SIGNAL ROUTE
IC6101 : FM/AM IF DETECTION·FM STEREO DECODER
IC6101 LA1836M-TB
C6152 : ACG1052-A-T
C6153, 6154 : ACG1051-A-T
FM SD ADJ
T-METER
S-METER
AM SD ADJ
Q6115, Q6116 : MUTE
MUTE
MUTE DRIVE
Q6117 : MUTE DRIVE
FM MONO
Q6112 : FORCED MONO DRIVE (FM)
+7.5V
+12V
AM RF TUNING BLOCK (MW)
AM RF TUNING BLOCK
AXX1044
L6109 : T-METER ADJ.
Q6107 : IF AMP
AM/FM
Q6108 : AM/FM BAND SW
Q6110, Q6111 : PLL LOOP FILTER DC AMP
Q6113 : CONSTANT-VOLTAGE POWER SUPPLY
L6102, L6104, T6101 : FRONT END ADJ.
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
Q6103 : OSC
D6101-D6104 : 1SV228-TL
Q6104, Q6105 : BUFFER AMP
Q6109 : FM +B SW
+5V
IC6102 LM7001J PLL
IC6102 : PLL IC
X6102 A331042-A
CH CH
(AM IF)
Q6118 : FORCED MONO DRIVE (AM)
AM MONO
+7.2V
AM STEREO
IC6103 : AM STEREO DECODER IC
IC6103 MC13020M-TB
C6199, 6200 : ACG1051-A-T
C6191-C6194 : ACG1050-A-T
Q6121, Q6122 : H.P.F
Q6119, Q6120 : AM IF AMP
Q6123, Q6124 : AM OUTPUT AMP
CN6101 KP200111L
NC (RDS)
NC
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE IND.
+12V
+5V
STEREO IND.
To AF assy CN9 (→SCH-10)
A(1:12)
1
2
3
4
5
6
A
B
C
D

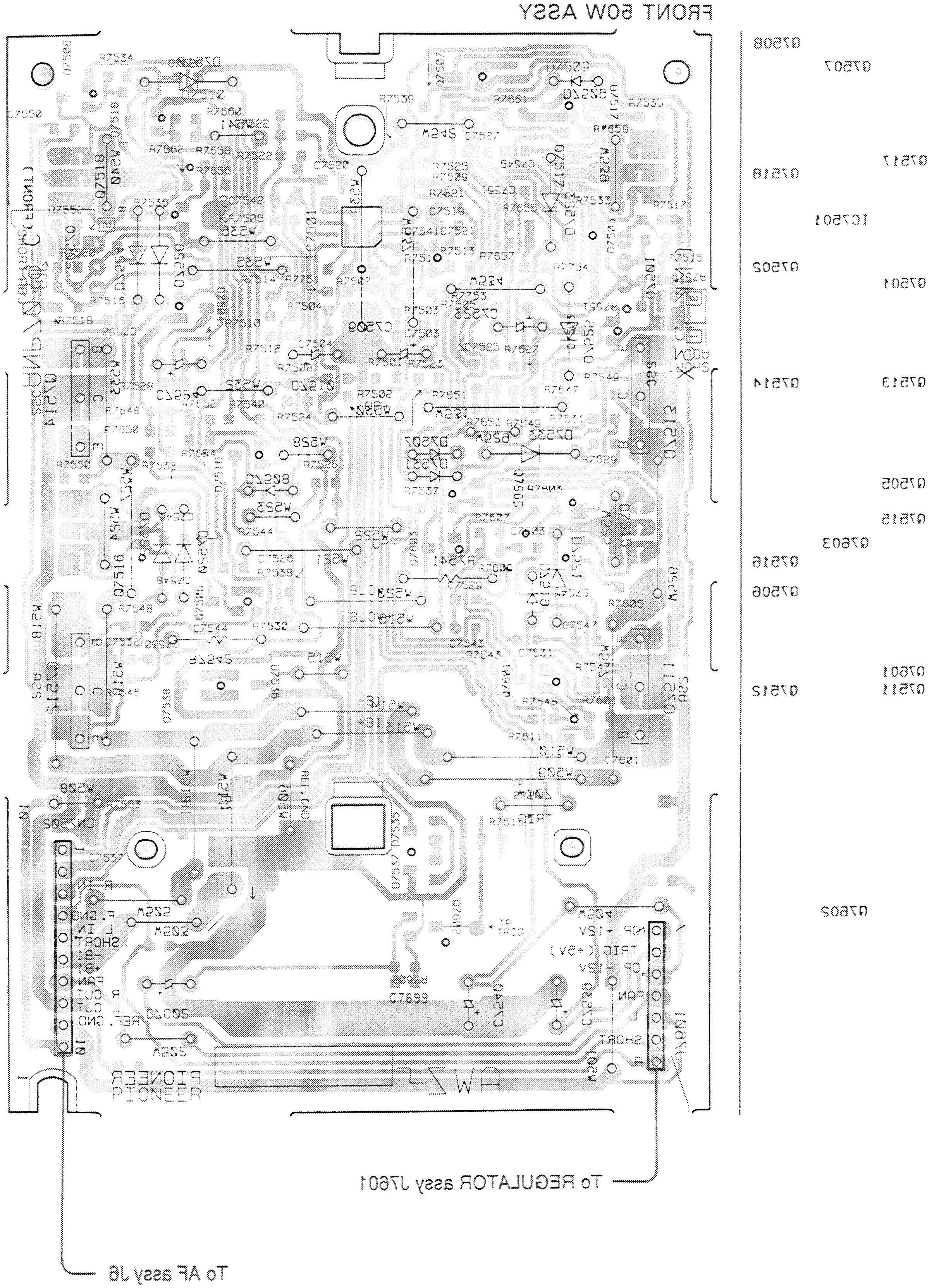
8.3 LED BOARD ASSY, SENSOR BOARD ASSY, MOTOR BOARD ASSY, SW BOARD ASSY, MECHANISM BOARD ASSY AND PICKUP ASSY

SCH – 5


A
B
C
D
SL MECHANISM BOARD ASSY
(AWX7007)
SW BOARD ASSY (AWZ7330)
S601
DSG1017
CLAMP SW
J603
LED BOARD ASSY
(AWZ7329)
J602
R604
390
D602
AN306
D601
AN306
Q601,Q602 :
DISC SENSOR
Q602
PS3062
Q601
PS3062
R602
6.8K
R601
6.8K
R603
47K
J601
+5V
LPS3
LPS2
LPS1
LMTR
GND
SENSOR BOARD
ASSY (AWZ7328)
J604
MOTOR BOARD
ASSY (AWZ7331)
M
MOTOR ASSY
AEA7000
To AF assy (1/3)
CN8205 (➔SCH–8)
PICKUP ASSY
(PEA1291)
TRACKING
COIL
FOCUS
COIL
OUTSIDE
INSIDE
NEAR
FAR
LD
MD
VCC
D1
D2
D3
D4
D5
GND
HOLOGRAM LASER UNIT
PRE-AMP BOARD ASSY
SHORT
LAND
C110 0.01
R116 68
R107 68
R106 68
R105 100K
C104 100 /6.3
R125 0
Q101
2SB1189
C107 0.1 /25
R126 0
LD POWER
R104 270
C105 0.01
VR101 2.2K
R112 1M
R113 1M
C106 220P
R121 0
R122 0
R120 0
R114 39K
R115 39K
R124 0
C109 0.1/25
IC101
M51593FP
LD
MD
PD1
PD2
Vss
F
E
VR
VC
NC
Vcc
LD ON
RF1
RFO
FE
FE BIAS
TE
EI
EO
NC
C108 0.1/25
R111 560K
R101 36K
TR.BAL
VR102 22K
R109 12K
R110 22K
CN102
ACT F –
ACT F +
ACT T –
ACT T +
GND
+5V
VC
LD ON
FE
TE
EO
RF
To AF assy (1/3)
CN8131 (➔SCH–8)
MECHANISM BOARD
ASSY (PWX1192)
INSIDE SW DSG1016
S610
D.C.MOTOR ASSY
(SPINDLE)
PEA1235
CARRIAGE DC MOTOR
ASSY PEA1246
CN610
173979-4
INSD
SPDR
CADR
GNDD
To AF assy (1/3)
CN8202 (➔SCH–8)
SIGNAL ROUTE
: FOCUS SERVO LOOP LINE
: TRACKING SERVO LOOP LINE
: SIGNAL ROUTE
: LOADING MOTOR ROUTE
: SPINDLE MOTOR ROUTE
: CARRIAGE MOTOR ROUTE

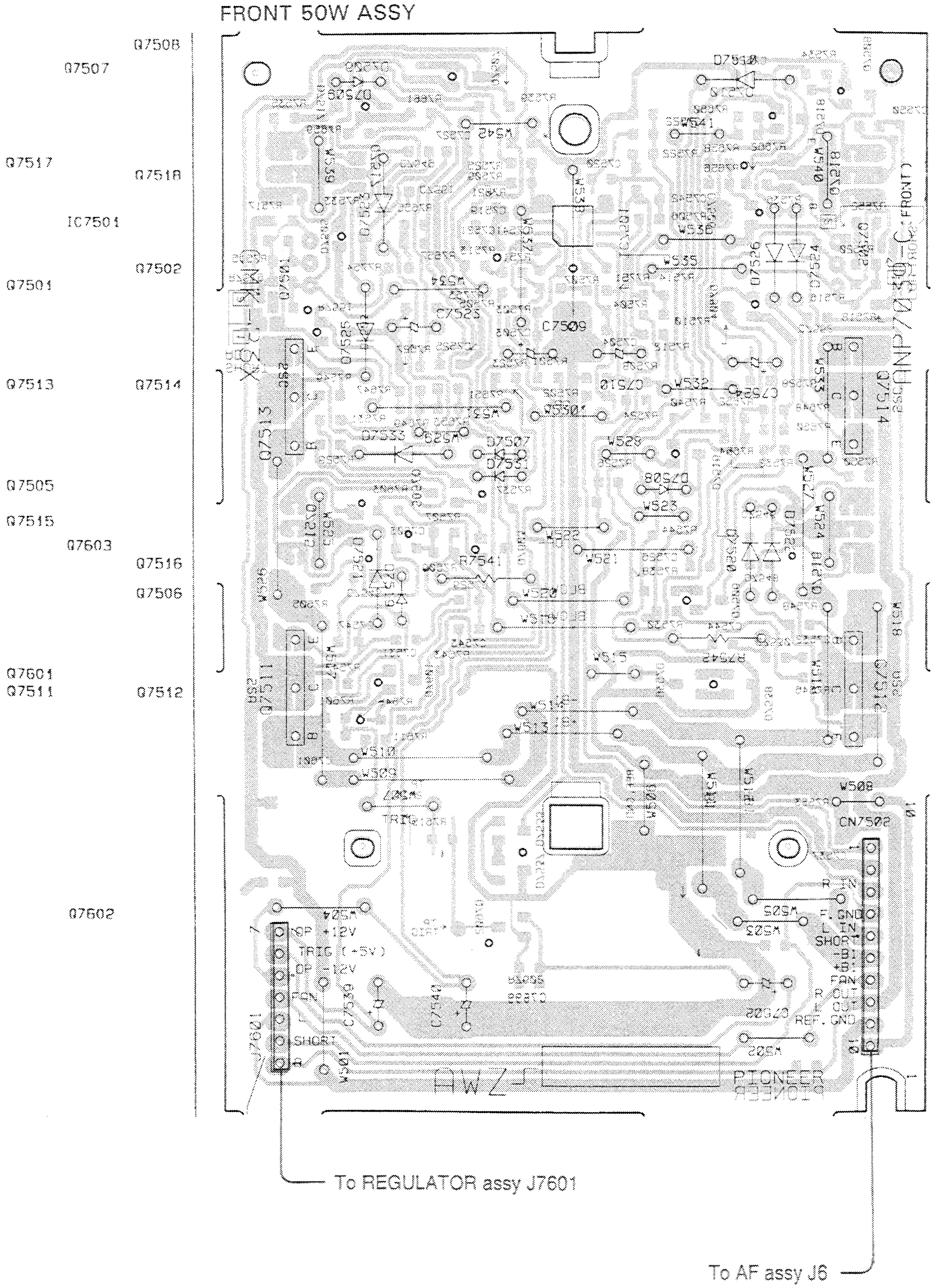
8.4 FRONT 50W ASSY

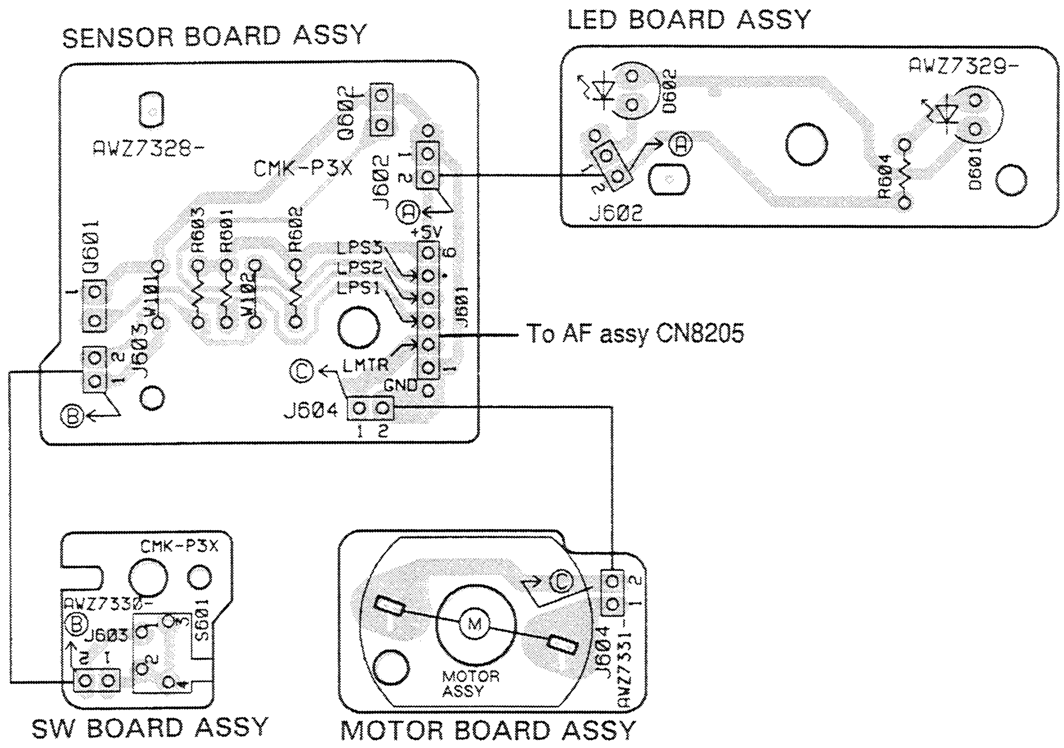
- This diagram is viewed from the foil side.


FRONT 50W ASSY
Q7508
Q7507
Q7518
Q7517
IC7501
Q7502
Q7501
Q7514
Q7513
Q7505
Q7515
Q7603
Q7516
Q7506
Q7512
Q7601
Q7511
Q7602
CN7502
PIONEER
To REGULATOR assy J7601
To AF assy J6

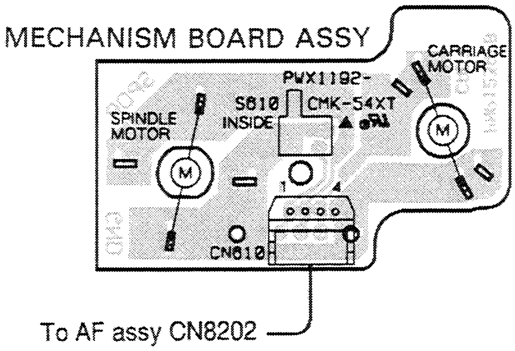
8.4 FRONT 50W ASSY

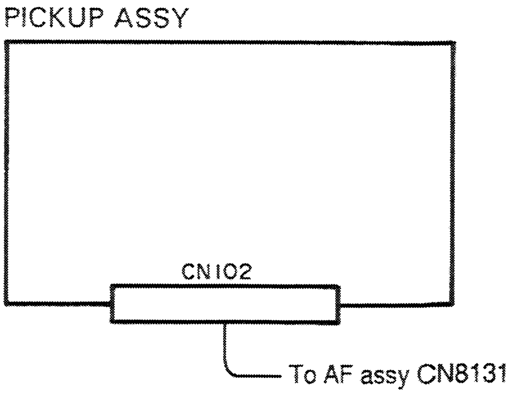
- This diagram is viewed from the mounted parts side.

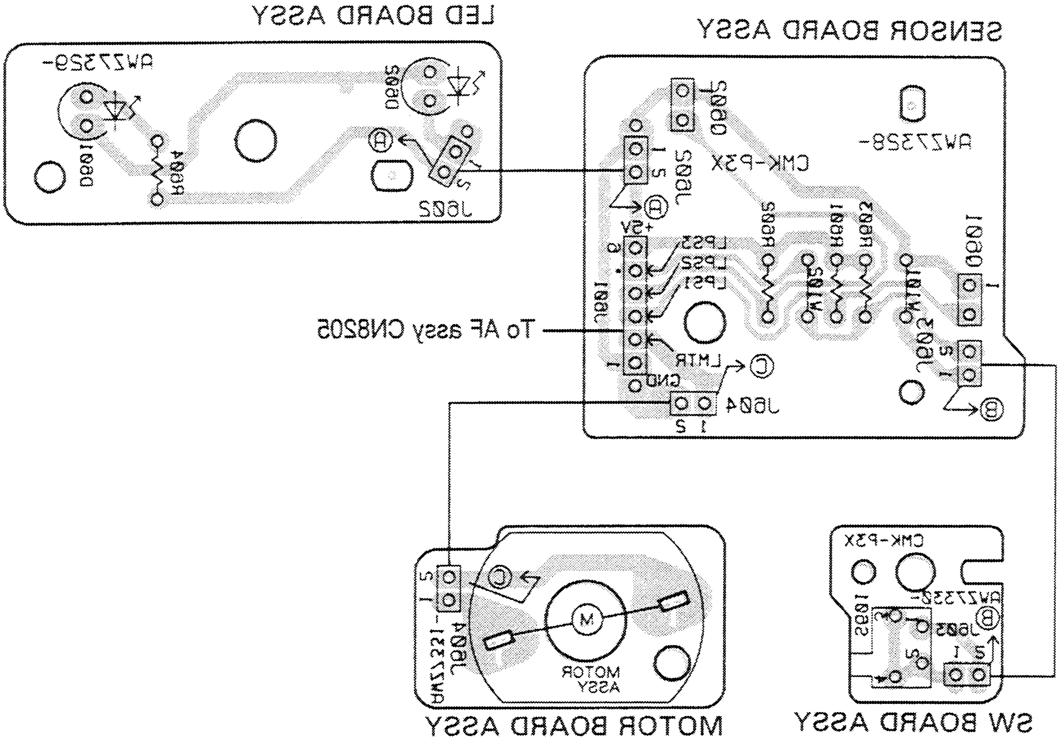

FRONT 50W ASSY
Q7508
Q7507
Q7517
Q7518
IC7501
Q7502
Q7501
Q7513
Q7514
Q7505
Q7515
Q7603
Q7516
Q7506
Q7601
Q7511
Q7512
Q7602
D7502
C7509
C7525
D7533
D7507
R7541
R7542
W520
W515
W513
W510
W509
W508
W504
W503
W502
W501
W532
W533
W535
W536
W541
W542
W550
W528
W523
W521
W522
CN7502
J7601
C7539
C7540
OP +12V
TRIG (+5V)
OP -12V
FAN
SHORT
R IN
F. GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF. GND
PIONEER
To REGULATOR assy J7601
To AF assy J6


SENSOR BOARD ASSY
AWZ7328-
CMK-P3X
Q602
J602
Ⓐ
Q601
R603
R601
R602
W101
W102
+5V
LPS3
LPS2
LPS1
J601
LMTR
GND
Ⓒ
J603
Ⓑ
J604
To AF assy CN8205
LED BOARD ASSY
AWZ7329-
D602
D601
R604
J602
Ⓐ
SW BOARD ASSY
CMK-P3X
AWZ7330-
Ⓑ
J603
S601
MOTOR BOARD ASSY
Ⓒ
M
MOTOR ASSY
J604
AWZ7331-

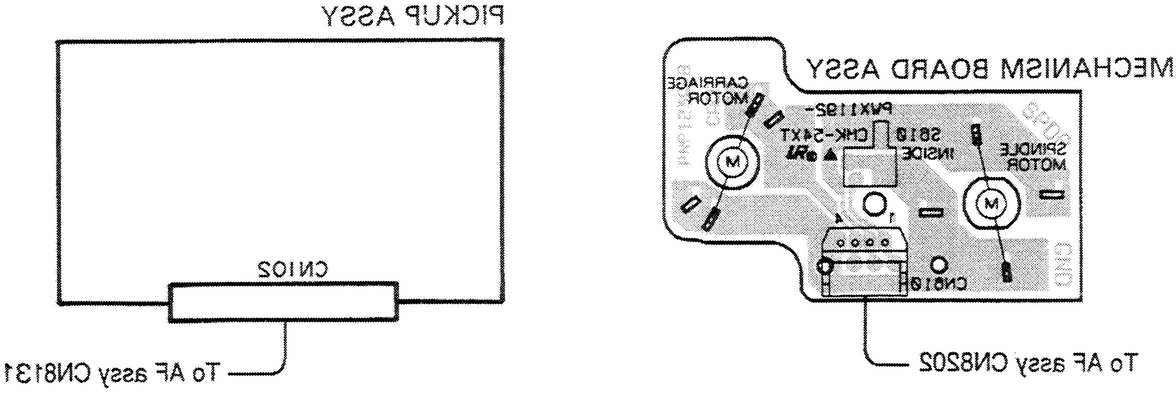
- This diagram is viewed from the mounted parts side.

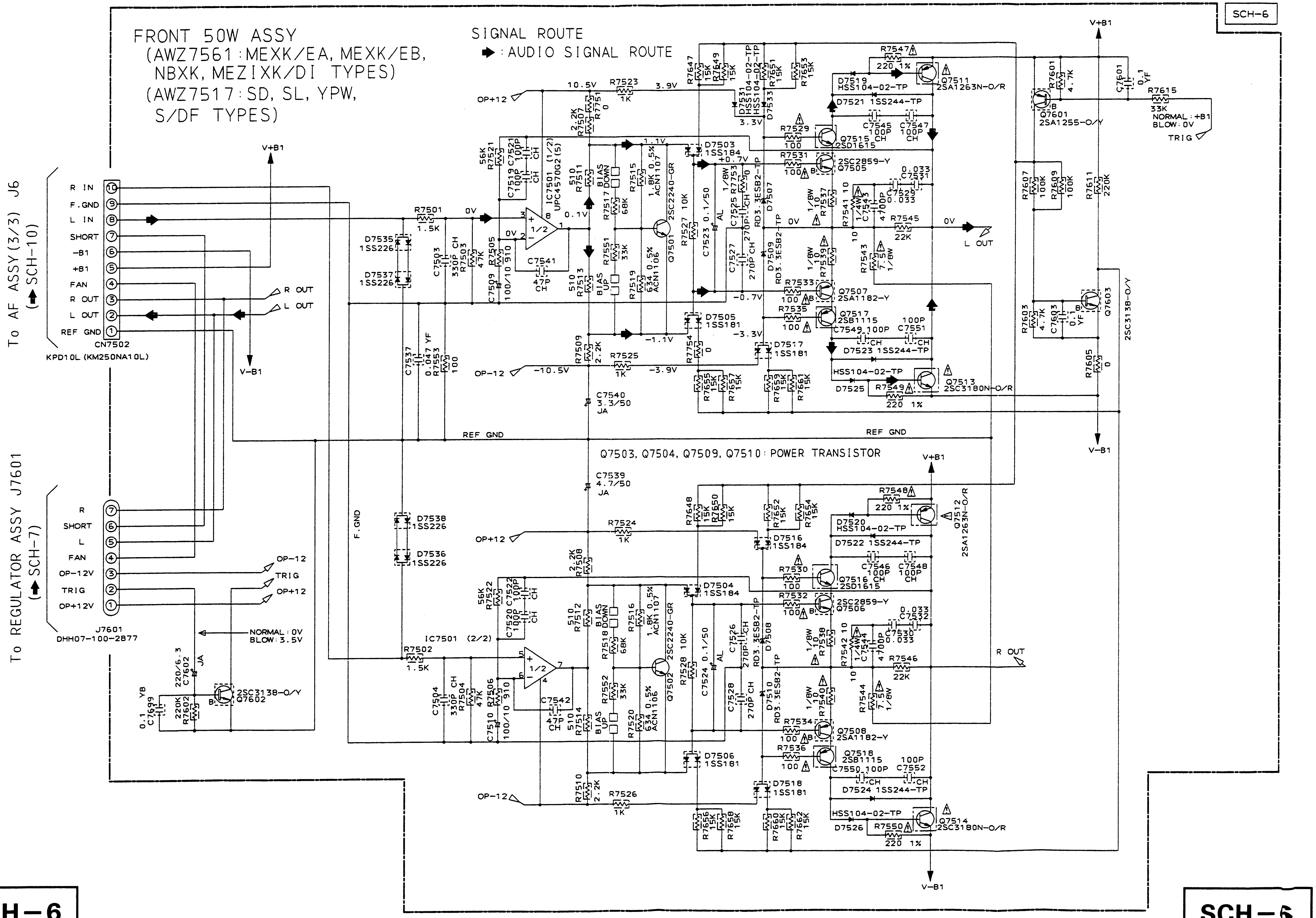

MECHANISM BOARD ASSY
SPINDLE MOTOR
M
PWX1192-
S610 INSIDE
CMK-S4XT
CARRIAGE MOTOR
M
CN610
To AF assy CN8202


PICKUP ASSY
CN102
To AF assy CN8131

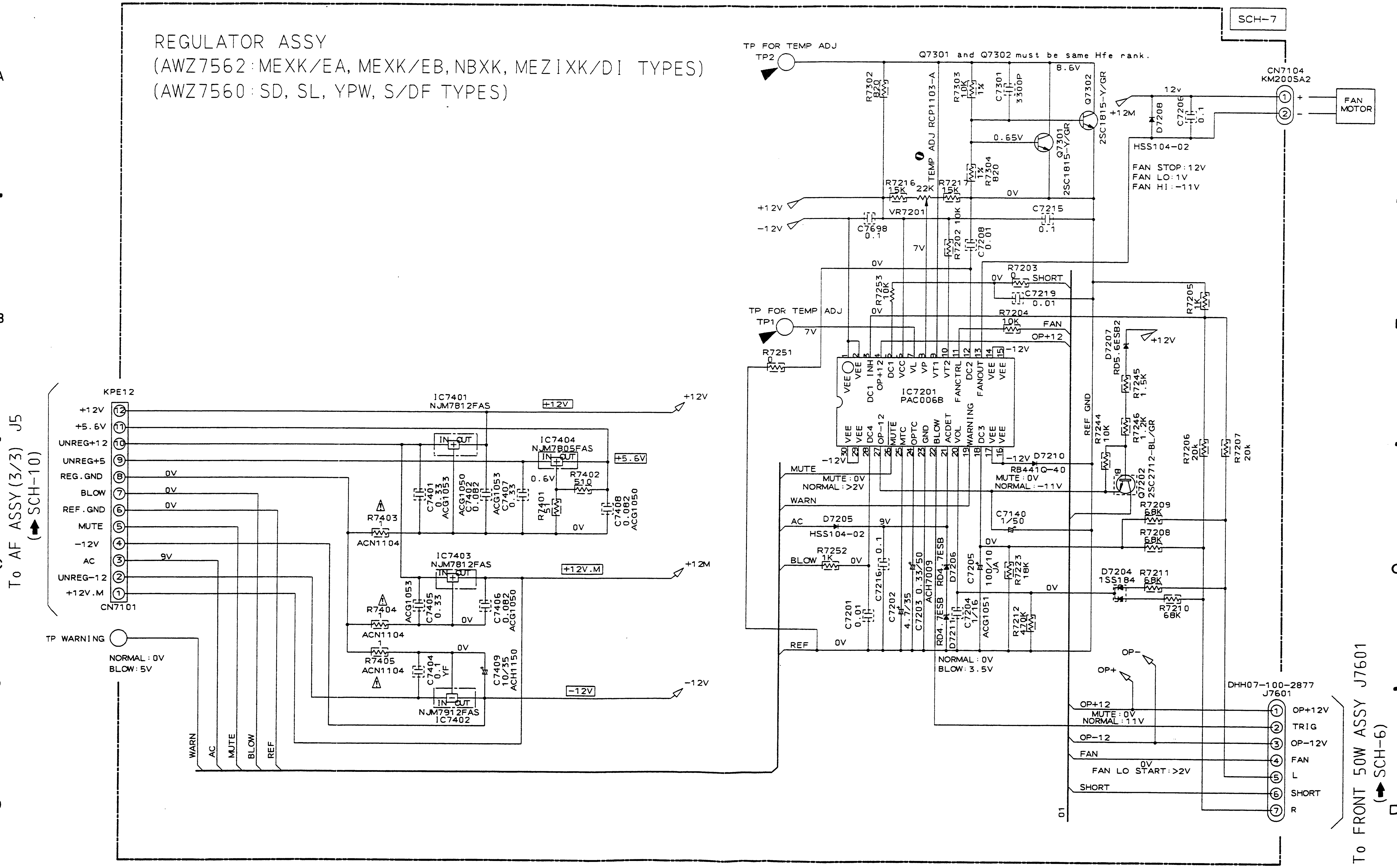

LED BOARD ASSY
AWZ7329-
D601
D602
R604
J602
SENSOR BOARD ASSY
AWZ7328-
CMK-P3X
J601
+5V
LPS3
LPS2
LPS1
GND
LMTR
J604
J605
D600
R602
R603
R601
To AF assy CN8205
MOTOR BOARD ASSY
AWZ7331-
J600
MOTOR ASSY
M
SW BOARD ASSY
AWZ7330-
CMK-P3X
J603
S601

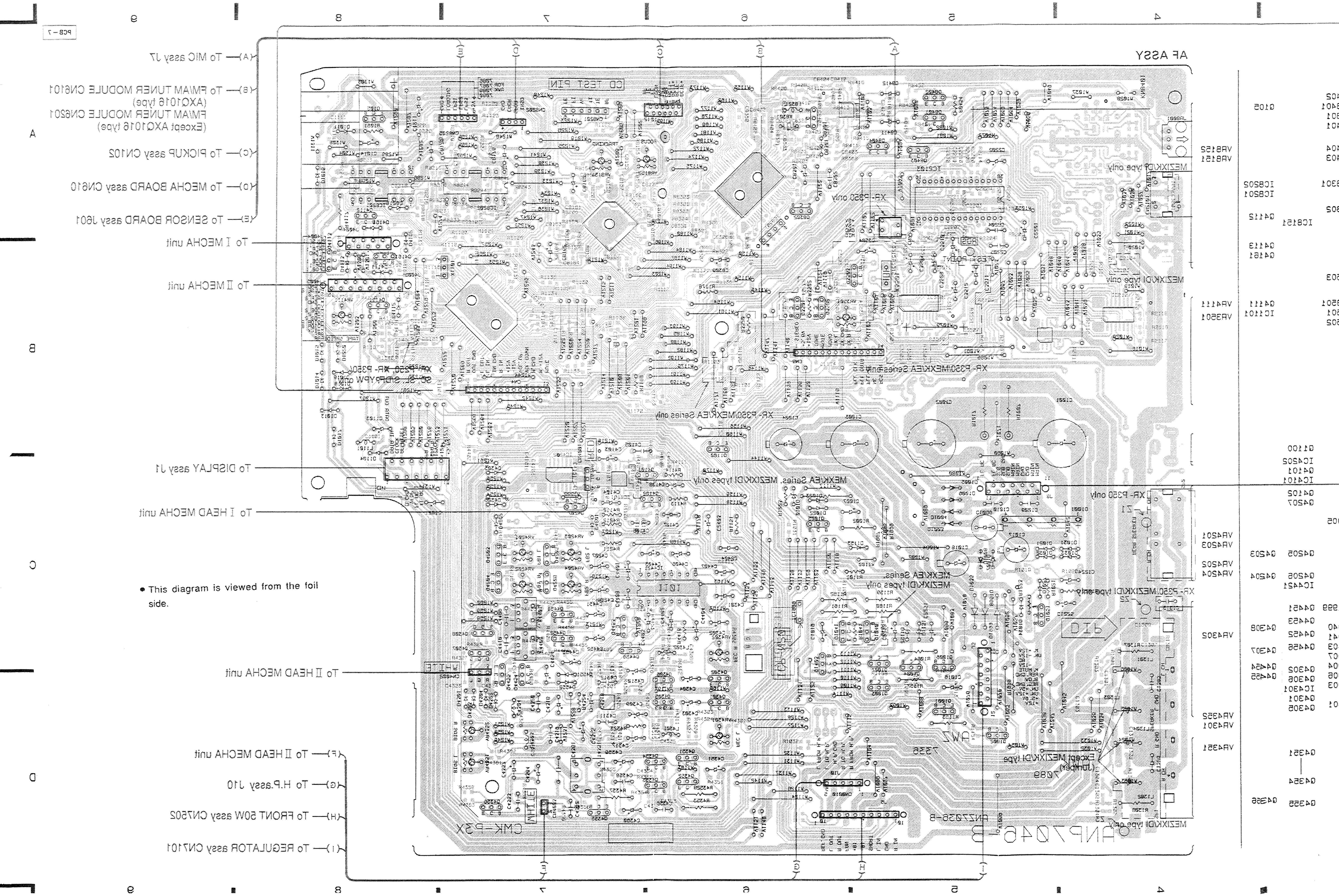
- This diagram is viewed from the foil side.


PICKUP ASSY
CN102
To AF assy CN8131
MECHANISM BOARD ASSY
PNX1192-
CMK-54XT
S810
INSIDE
CARRIAGE MOTOR
SPINDLE MOTOR
M
CN810
GND
To AF assy CN8202


SCH-6
FRONT 50W ASSY
(AWZ7561 : MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7517 : SD, SL, YPW, S/DF TYPES)
SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE
To AF ASSY (3/3) J6 (⬆ SCH-10)
R IN
F.GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF GND
CN7502
KPD10L (KM250NA10L)
V+B1
V-B1
R OUT
L OUT
To REGULATOR ASSY J7601 (⬆ SCH-7)
R
SHORT
L
FAN
OP-12V
TRIG
OP+12V
J7601
DHH07-100-2877
OP-12
TRIG
OP+12
NORMAL : 0V
BLOW : 3.5V
2SC3138-O/Y
Q7602
C7699
R7602
C7602
F.GND
REF GND
D7535 1SS226
D7537 1SS226
D7538 1SS226
D7536 1SS226
R7501 1.5K
R7502 1.5K
IC7501 (1/2) UPC4570G2(5)
IC7501 (2/2)
C7541 47P CH
C7542 47P CH
C7537
R7553 100
0.047 YF
OP+12
OP-12
10.5V
-10.5V
R7523 1K
R7524 1K
R7525 1K
R7526 1K
3.9V
-3.9V
1.1V
-1.1V
+0.7V
-0.7V
-3.3V
3.3V
0.1V
0V
BIAS DOWN
BIAS UP
2SC2240-GR
Q7501
Q7502
D7503 1SS184
D7504 1SS184
D7505 1SS181
D7506 1SS181
D7516 1SS184
D7517 1SS181
D7518 1SS181
C7540 3.3/50 JA
C7539 4.7/50 JA
Q7503, Q7504, Q7509, Q7510 : POWER TRANSISTOR
R7547 220 1%
R7548 220 1%
R7549 220 1%
R7550 220 1%
D7519 HSS104-02-TP
D7520 HSS104-02-TP
D7521 1SS244-TP
D7522 1SS244-TP
D7523 1SS244-TP
D7524 1SS244-TP
D7525 HSS104-02-TP
D7526 HSS104-02-TP
Q7511 2SA1263N-O/R
Q7512 2SA1263N-O/R
Q7513 2SC3180N-O/R
Q7514 2SC3180N-O/R
Q7515 2SD1615
Q7516 2SD1615
Q7505 2SC2859-Y
Q7506 2SC2859-Y
Q7507 2SA1182-Y
Q7508 2SA1182-Y
Q7517 2SB1115
Q7518 2SB1115
C7545 100P CH
C7546 100P CH
C7547 100P CH
C7548 100P CH
C7549 100P
C7550 100P
C7551 100P CH
C7552 100P CH
C7529 0.033
C7530 0.033
C7531 0.033
C7532 0.033
R7545 22K
R7546 22K
RD3.3ESB2-TP
Q7601 2SA1255-O/Y
R7601 4.7K
C7601 0.1 YF
R7615 33K
NORMAL : +B1
BLOW : 0V
TRIG
R7607 100K
R7609 100K
R7611 220K
R7603 4.7K
C7603 0.1 YF
Q7603 2SC3138-O/Y
R7605 0

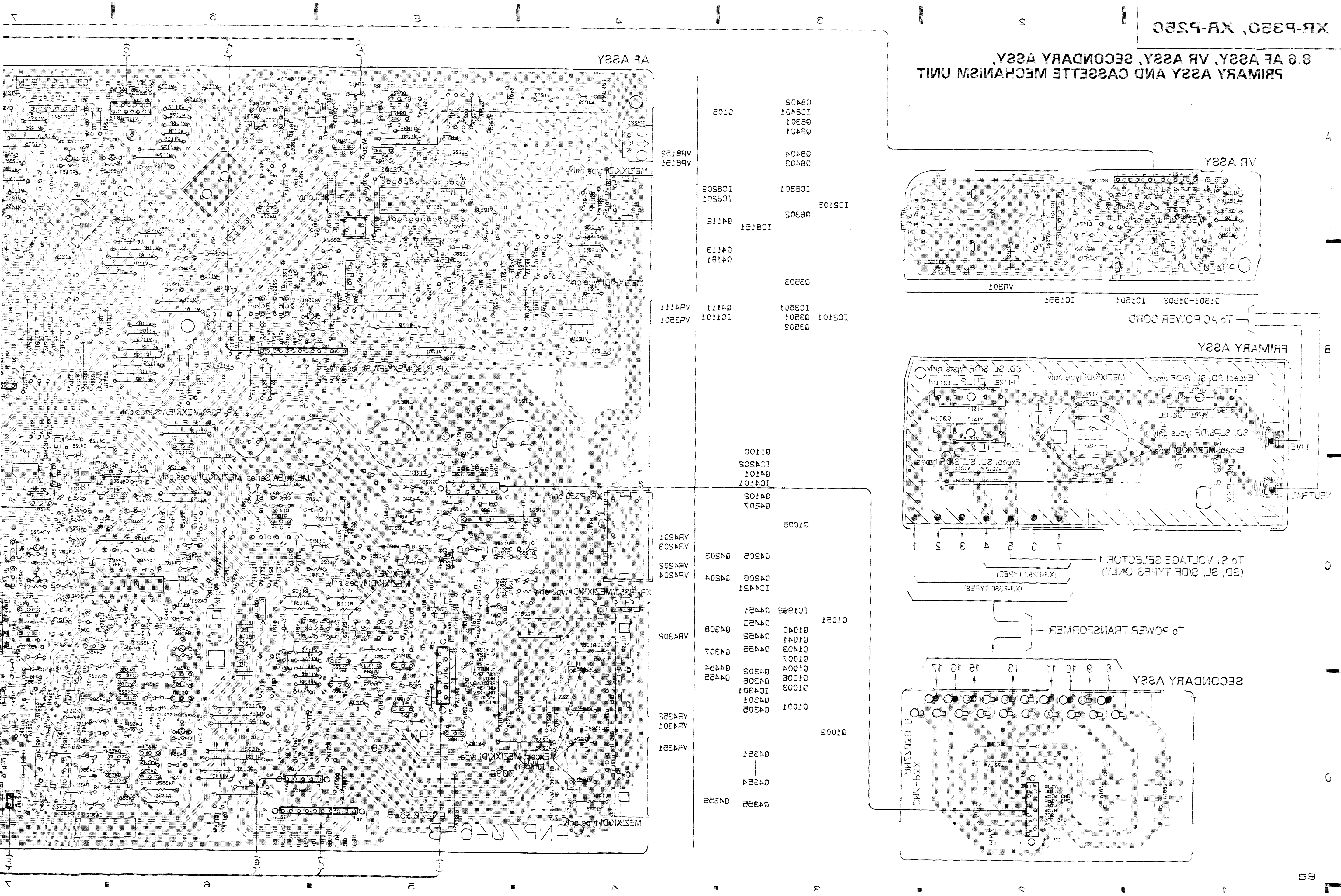
8.5 REGULATOR ASSY


SCH-7
REGULATOR ASSY
(AWZ7562: MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI TYPES)
(AWZ7560: SD, SL, YPW, S/DF TYPES)
TP FOR TEMP ADJ
TP2
Q7301 and Q7302 must be same Hfe rank.
8.6V
R7302 820
TEMP ADJ RCP1103-A
R7303 10K 1%
C7301 3300P
Q7302 2SC1815-Y/GR
Q7301 2SC1815-Y/GR
0.65V
R7304 820 1%
R7216 15K
22K
R7217 15K
VR7201
0V
+12V
-12V
C7698 0.1
7V
R7202 10K
C7208 0.01
C7215 0.1
+12M
12V
D7208
C7205 0.1
HSS104-02
FAN STOP: 12V
FAN LO: 1V
FAN HI: -11V
CN7104 KM200SA2
FAN MOTOR
R7203
SHORT
C7219 0.01
R7253 10K
R7204 10K
FAN
OP+12
R7205 1K
TP FOR TEMP ADJ
TP1
R7251
IC7201 PAC006B
VEE VEE DC1 INH OP+12 DC1 VCC VL VP VT1 VT2 FANCTRL DC2 FANOUT VEE VEE
VEE VEE DC4 OP-12 MUTE MTC OPTC GND BLOW ACDET VOL WARNING DC3 VEE VEE
D7207 RD5.6ESB2
R7245 1.5K
REF GND
R7244 10K
R7246 1.2K
Q7202 2SC2712-BL/GR
R7206 20k
R7207 20k
D7210 RB441Q-40
MUTE: 0V
NORMAL: >2V
NORMAL: -11V
WARN
AC
D7205 HSS104-02
9V
C7140 1/50
R7209 68K
R7208 68K
R7252 1K
BLOW
C7216 0.1
C7202 4.7/35
C7203 0.33/50 ACH7009
D7206 RD4.7ESB
D7211
C7204 1/16 ACG1051
C7205 100/10 JA
R7223 18K
R7212 470K
C7201 0.01
D7204 1SS184
R7211 68K
R7210 68K
REF
NORMAL: 0V
BLOW: 3.5V
OP-
OP+
DHH07-100-2877 J7601
OP+12V
TRIG
OP-12V
FAN
L
SHORT
R
MUTE: 0V
NORMAL: 11V
OP-12
FAN LO START: >2V
To FRONT 50W ASSY J7601 (SCH-6)
To AF ASSY (3/3) J5 (SCH-10)
KPE12
+12V
+5.6V
UNREG+12
UNREG+5
REG.GND
BLOW
REF.GND
MUTE
-12V
AC
UNREG-12
+12V.M
CN7101
IC7401 NJM7812FAS
IC7404 NJM7805FAS
C7401 0.33 ACG1053
C7402 0.082 ACG1050
C7407 0.33 ACG1053
R7401 51
R7402 510
C7408 0.082 ACG1050
0.6V
R7403 ACN1104
IC7403 NJM7812FAS
R7404 ACN1104
C7405 0.33 ACG1053
C7406 0.082 ACG1050
R7405 ACN1104
C7404 0.1 YF
C7409 10/35 ACH1150
IC7402 NJM7912FAS
IN OUT
+5.6V
+12V.M
-12M
TP WARNING
NORMAL: 0V
BLOW: 5V
WARN AC MUTE BLOW REF

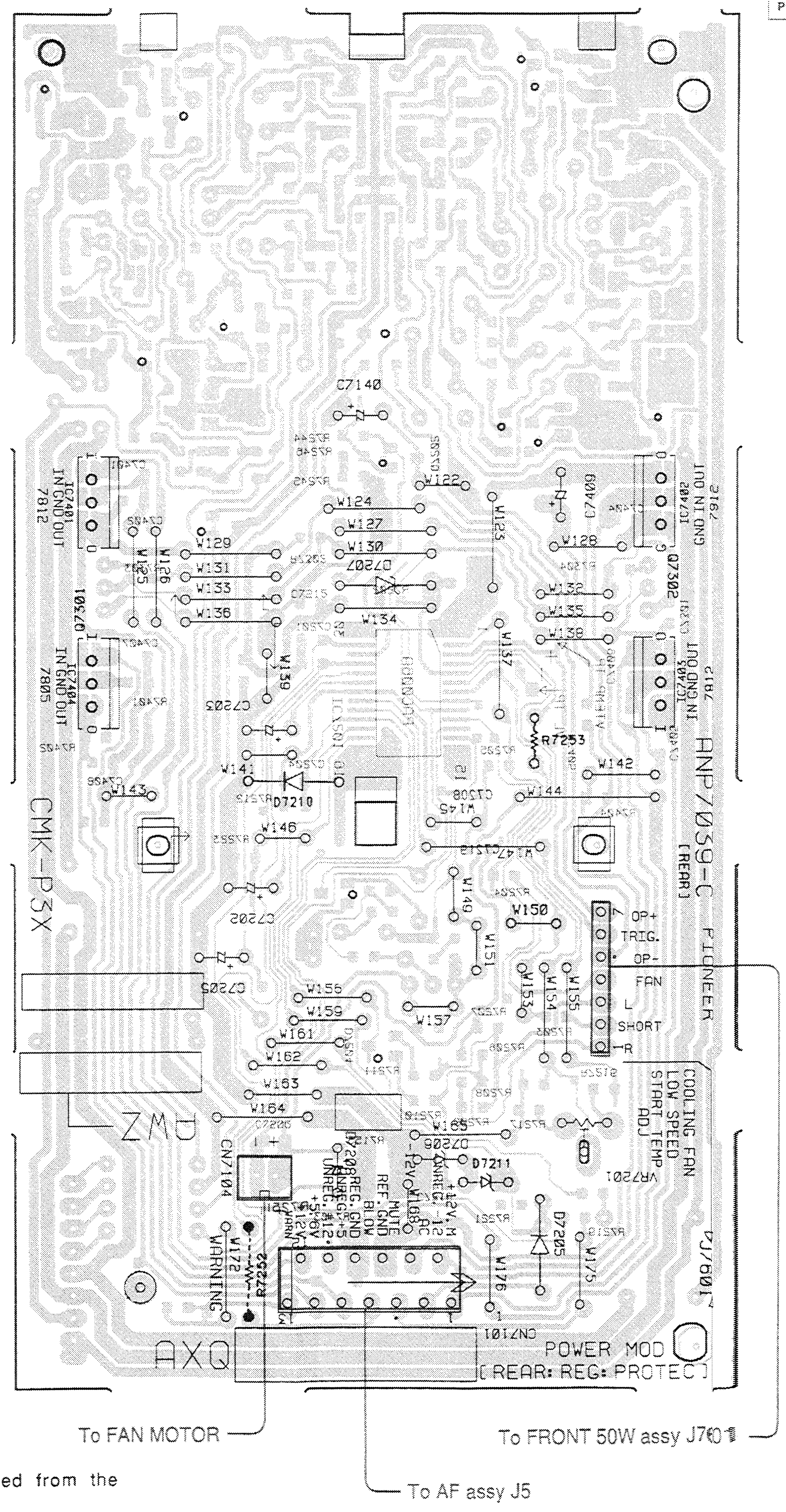

PCB - 7
AF ASSY
To MIC assy J7 —(A)
To FM/AM TUNER MODULE CN6101 (AXQ1016 type)
FM/AM TUNER MODULE CN6201 (Except AXQ1016 type) —(B)
To PICKUP assy CN102 —(C)
To MECHA BOARD assy CN610 —(D)
To SENSOR BOARD assy J601 —(E)
To I MECHA unit
To II MECHA unit
To DISPLAY assy J1
To I HEAD MECHA unit
To II HEAD MECHA unit
To II HEAD MECHA unit —(F)
To H.P.assy J10 —(G)
To FRONT 50W assy CN7502 —(H)
To REGULATOR assy CN7101 —(I)
CD TEST PIN
MEZ/KX/DI type only
XR-P850 only
XR-P350/MEX/KX/EA Series only
XR-P350/MEX/KX/EA Series only
MEX/KX/EA Series, MEZ/KX/DI types only
XR-P350 only
MEX/KX/EA Series,
MEZ/KX/DI types only
XR-P350/MEZ/KX/DI type only
Except MEZ/KX/DI type
(Jumper)
MEZ/KX/DI type only
XR-P350, XR-P350L
SC,SL,SD/PYPW only
ANP7046-B
ANZ7036-B
CMK-P3X
WHITE
DIP
9
8
7
6
5
4
A
B
C
D

- This diagram is viewed from the foil side.

8.6 AF ASSY, VR ASSY, SECONDARY ASSY, PRIMARY ASSY AND CASSETTE MECHANISM UNIT


AF ASSY
VR ASSY
PRIMARY ASSY
SECONDARY ASSY
CD TEST PIN
XR-P350 only
MEZIXKIDI type only
XR-P350/MEXKIEA Series only
MEXKIEA Series, MEZIXKIDI types only
Except MEZIXKIDI type
ANZ7036-B
ANP7046-B
To AC POWER CORD
SD, SL, S/DF types only
Except SD, SL, S/DF types
LIVE
NEUTRAL
1 2 3 4 5 6 7
To S1 VOLTAGE SELECTOR 1 (SD, SL, S/DF TYPES ONLY)
(XR-P250 TYPES)
(XR-P350 TYPES)
To POWER TRANSFORMER
8 9 10 11 13 15 16 17
VR301
IC1551
IC1501
Q1501-Q1503
A
B
C
D
1
2
3
4
5
6
7

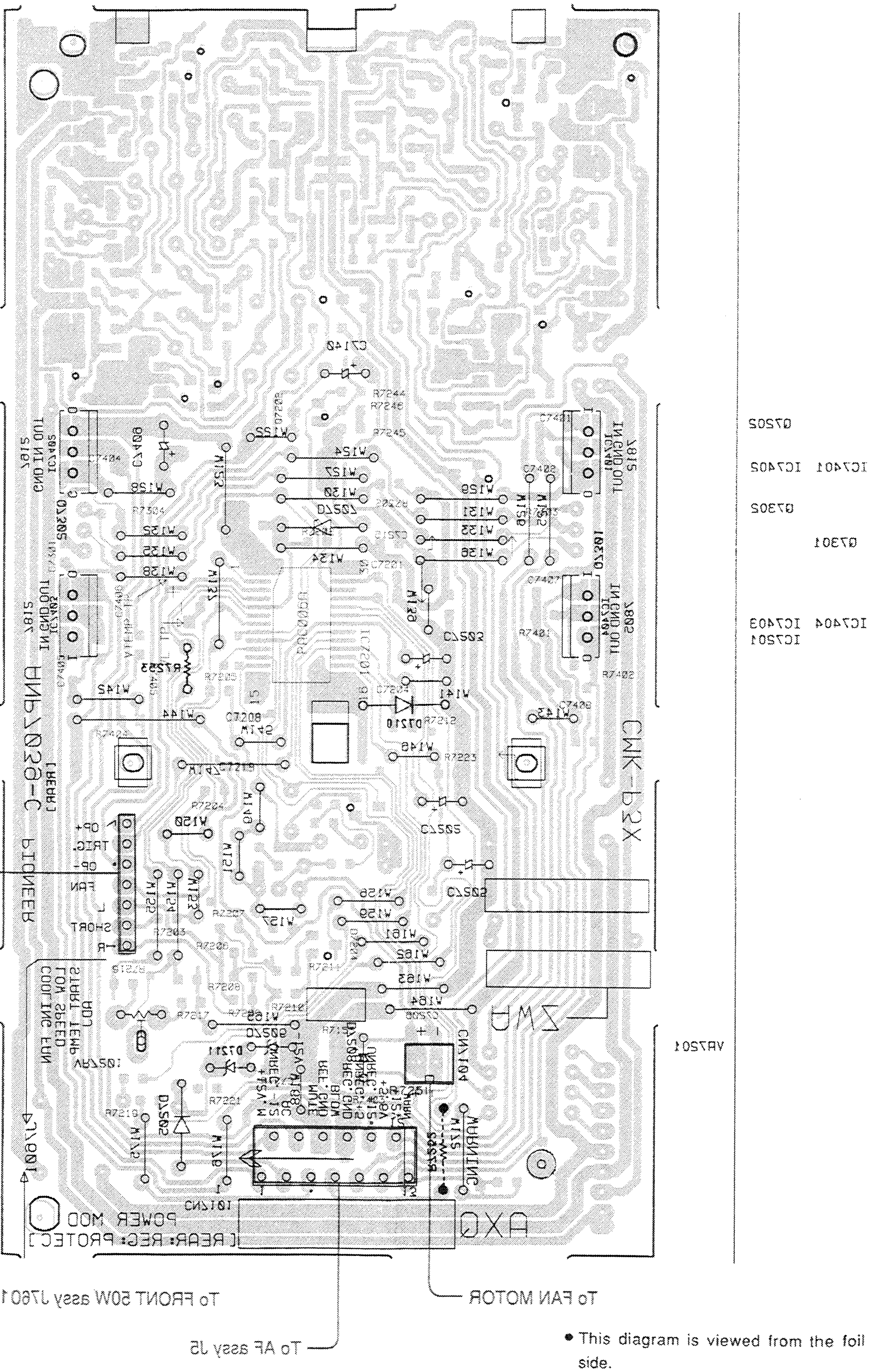
REGULATOR ASSY


A
B
C
D
Q7202
IC7401 IC7402
Q7302
Q7301
IC7404 IC7403
IC7201
VR7201
C7140
W122
W123
W124
W127
W128
W129
W130
W131
W132
W133
W134
W135
W136
W137
W138
W139
W141
W142
W143
W144
W145
W146
W147
W149
W150
W151
W153
W154
W155
W156
W157
W159
W161
W162
W163
W164
W165
W168
W172
W175
W176
IC7401 IN GND OUT 7812
IC7402 GND IN OUT 7812
IC7404 IN GND OUT 7805
IC7403 IN GND OUT 7812
Q7301
Q7302
D7207
D7210
D7211
D7205
C7409
C7203
C7202
C7205
C7208
C7206
R7253
R7252
CN7104
CN7101
CMK-P3X
ANP7039-C [REAR]
PIONEER
OP+
TRIG.
OP-
FAN
L
SHORT
R
COOLING FAN LOW SPEED START TEMP ADJ
VR7201
WARNING
AXQ
ZMU
POWER MOD
[REAR: REG: PROTEC]
To FAN MOTOR
To FRONT 50W assy J701
To AF assy J5

- This diagram is viewed from the mounted parts side.

PCB-6

REGULATOR ASSY


Q7202
IC7401 IC7402
Q7302
Q7301
IC7404 IC7403
IC7201
VR7201
PIONEER ANP2029-C
CWK-P2X
POWER MOD [REAR: REG: PROTEC]
CN7101
CN7104
AXO
+OP
TRIG.
-OP
FAN
L
SHORT
R
COOLING FAN
LOW SPEED
START PWM
ADJ TEMP
VR7201
C7140
C7202
C7205
C7209
D7210
D7205
D7211
IC7251
IC7401
IC7402
IC7403
IC7404
Q7301
Q7302
R7253
MURUNTIC

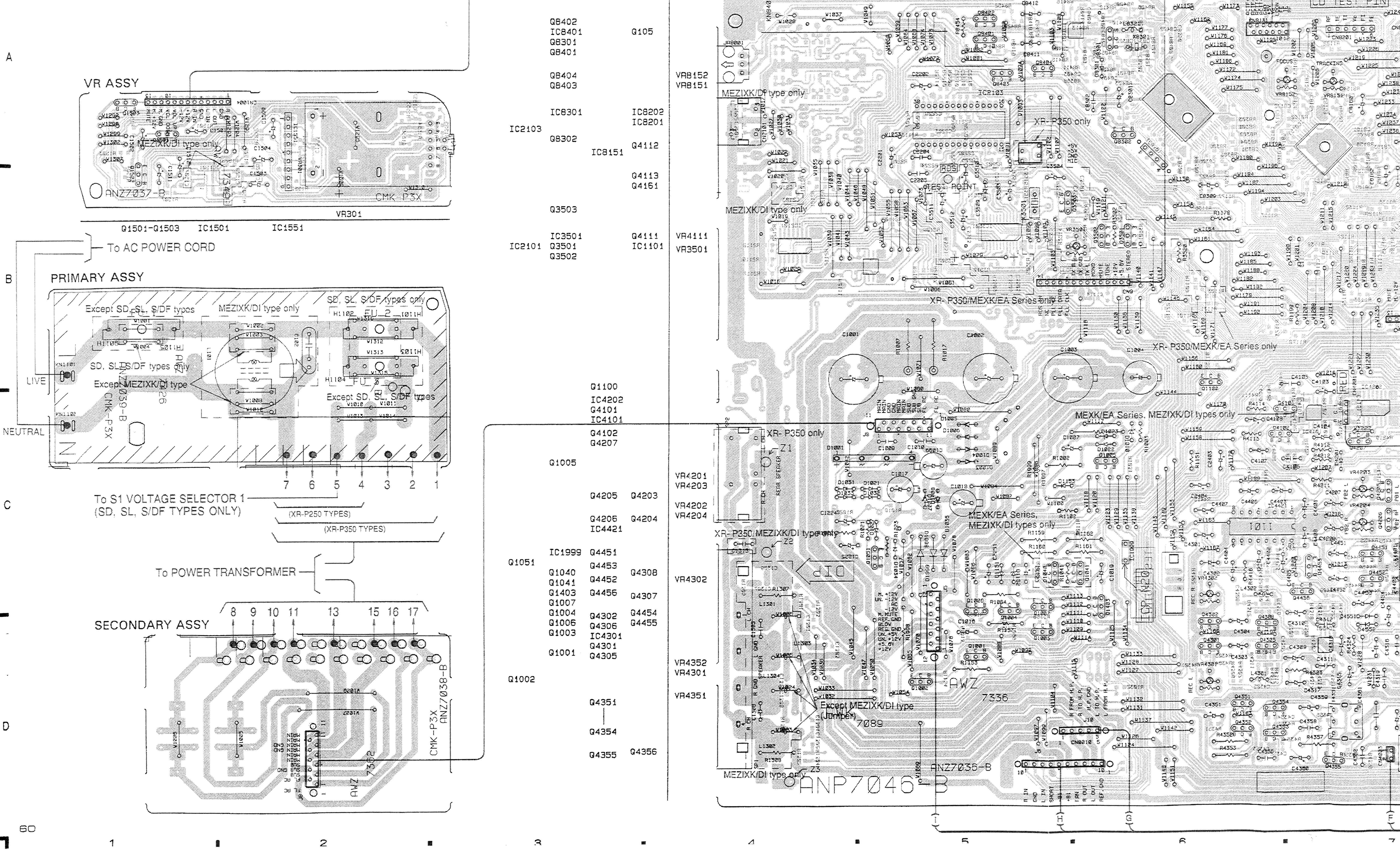
To FRONT 50W assy J7601

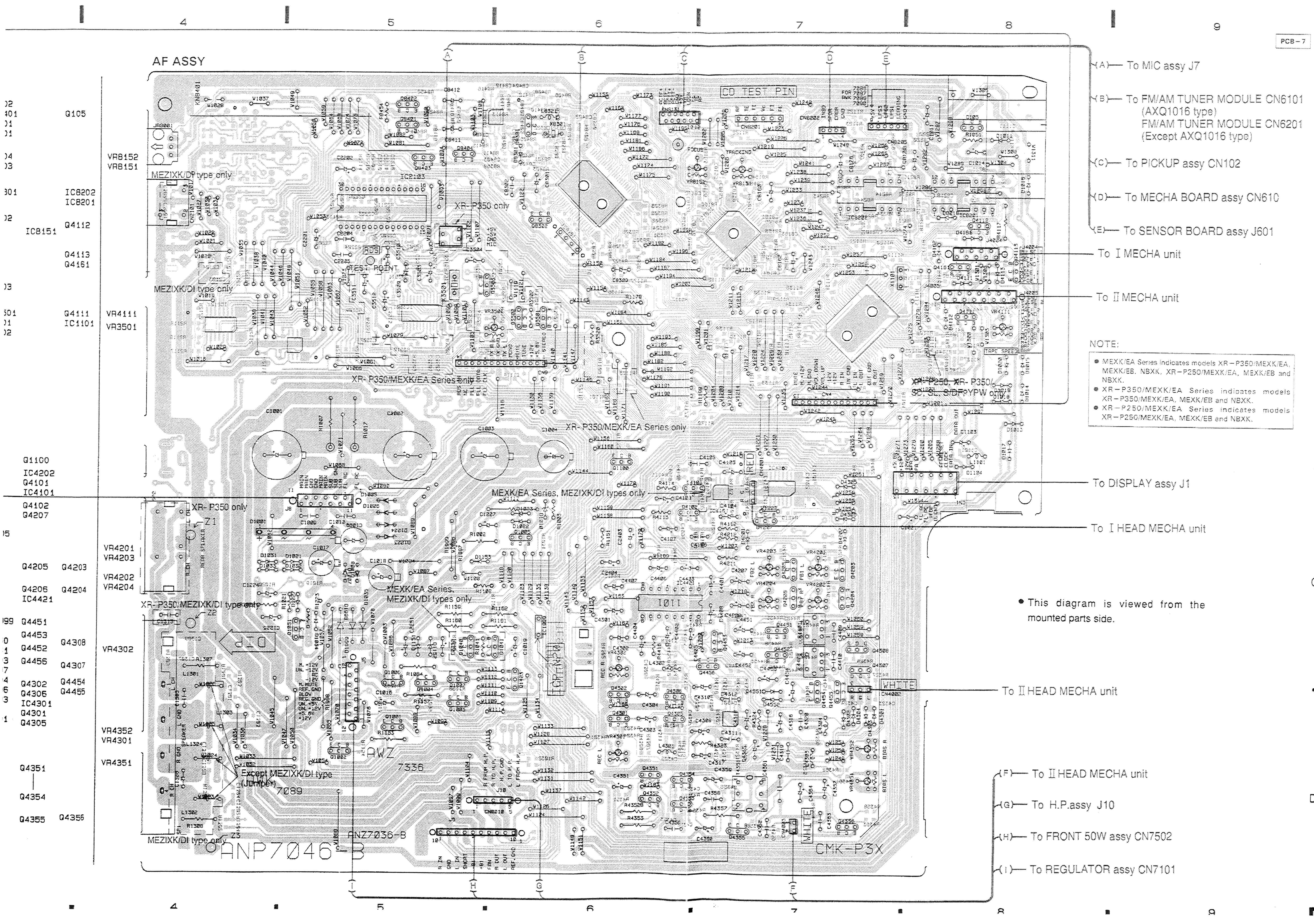
To FAN MOTOR

To AF assy J5

- This diagram is viewed from the foil side.

8.6 AF ASSY, VR ASSY, SECONDARY ASSY, PRIMARY ASSY AND CASSETTE MECHANISM UNIT


AF ASSY
VR ASSY
MEZIXK/DI type only
ANZ7037-B
CMK-P3X
7340
VR301
Q1501-Q1503
IC1501
IC1551
To AC POWER CORD
PRIMARY ASSY
Except SD, SL, S/DF types
MEZIXK/DI type only
SD, SL, S/DF types only
SD, SLDS/DF types only
Except MEZIXK/DI type
Except SD, SL, S/DF types
LIVE
NEUTRAL
ANZ7039-B
CMK-P3X
7 6 5 4 3 2 1
To S1 VOLTAGE SELECTOR 1
(SD, SL, S/DF TYPES ONLY)
(XR-P250 TYPES)
(XR-P350 TYPES)
To POWER TRANSFORMER
SECONDARY ASSY
8 9 10 11 13 15 16 17
ANZ7038-B
CMK-P3X
AWZ
7362
Q8402
IC8401
Q8301
Q8401
Q105
Q8404
Q8403
VR8152
VR8151
IC8301
IC2103
IC8202
IC8201
Q8302
IC8151
Q4112
Q4113
Q4161
Q3503
IC3501
IC2101
Q3501
Q3502
Q4111
IC1101
VR4111
VR3501
Q1100
IC4202
Q4101
IC4101
Q4102
Q4207
Q1005
VR4201
VR4203
Q4205
Q4203
VR4202
VR4204
Q4206
IC4421
Q4204
IC1999
Q4451
Q1051
Q4453
Q1040
Q4452
Q4308
VR4302
Q1041
Q1403
Q4456
Q4307
Q1007
Q1004
Q4302
Q4454
Q1006
Q4306
Q4455
Q1003
IC4301
Q4301
Q1001
Q4305
VR4352
VR4301
Q1002
VR4351
Q4351
Q4354
Q4355
Q4356
MEZIXK/DI type only
XR-P350 only
TEST POINT
RDS
MEZIXK/DI type only
XR-P350/MEXK/EA Series only
XR-P350/MEXK/EA Series only
CD TEST PIN
FOCUS
TRACKING
MEXK/EA Series, MEZIXK/DI types only
XR-P350 only
Z1
MEXK/EA Series, MEZIXK/DI types only
XR-P350/MEZIXK/DI type only
Z2
DIP
Except MEZIXK/DI type (Jumper)
7089
AWZ
7336
MEZIXK/DI type only
Z3
ANP7046-B
ANZ7036-B
A
B
C
G
H
I
1 2 3 4 5 6 7
A
B
C
D


AF ASSY
4
5
6
7
8
9
A
B
C
D
(A)— To MIC assy J7
(B)— To FM/AM TUNER MODULE CN6101 (AXQ1016 type) FM/AM TUNER MODULE CN6201 (Except AXQ1016 type)
(C)— To PICKUP assy CN102
(D)— To MECHA BOARD assy CN610
(E)— To SENSOR BOARD assy J601
To Ⅰ MECHA unit
To Ⅱ MECHA unit
To DISPLAY assy J1
To Ⅰ HEAD MECHA unit
To Ⅱ HEAD MECHA unit
(F)— To Ⅱ HEAD MECHA unit
(G)— To H.P.assy J10
(H)— To FRONT 50W assy CN7502
(I)— To REGULATOR assy CN7101
CD TEST PIN
MEZIXK/DI type only
XR-P350 only
TEST POINT
XR-P350/MEXK/EA Series only
XR-P350/MEXK/EA Series only
XR-P250, XR-P350/SD, SL, S/DF, YPW only
MEXK/EA Series, MEZIXK/DI types only
XR-P350 only
XR-P350/MEZIXK/DI type only
MEXK/EA Series, MEZIXK/DI types only
Except MEZIXK/DI type (Jumper)
MEZIXK/DI type only
RED
WHITE
WHITE
DIP
AWZ 7336
7089
ANZ7036-B
ANP7046-B
CMK-P3X
Q105
VR8152
VR8151
IC8202
IC8201
Q4112
IC8151
Q4113
Q4161
Q4111
IC1101
VR4111
VR3501
Q1100
IC4202
Q4101
IC4101
Q4102
Q4207
VR4201
VR4203
Q4205
Q4203
VR4202
VR4204
Q4206
Q4204
IC4421
Q4451
Q4453
Q4452
Q4456
Q4308
VR4302
Q4307
Q4302
Q4306
Q4454
Q4455
IC4301
Q4301
Q4305
VR4352
VR4301
VR4351
Q4351
Q4354
Q4355
Q4356

NOTE:

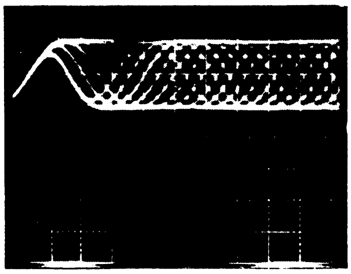
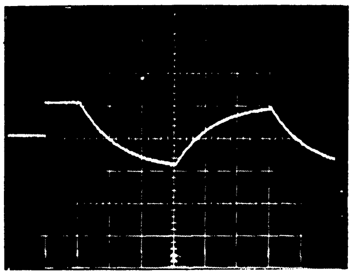
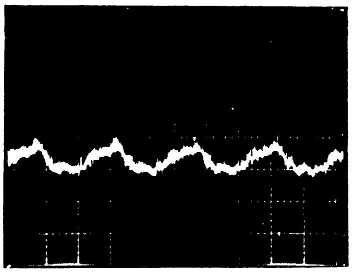
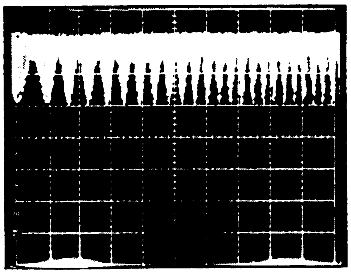
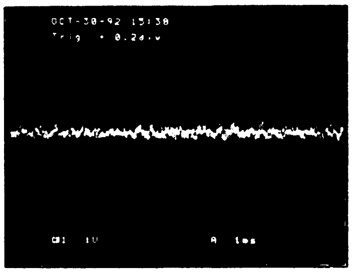
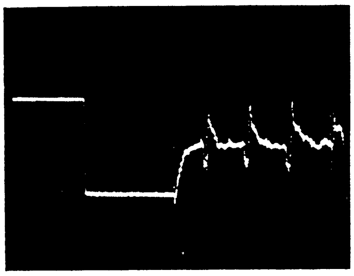
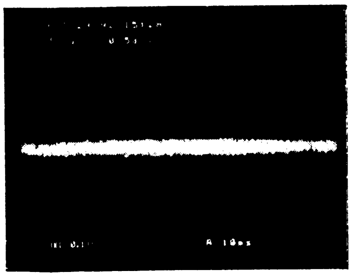
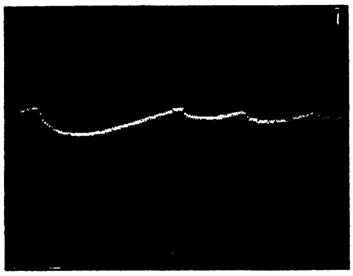
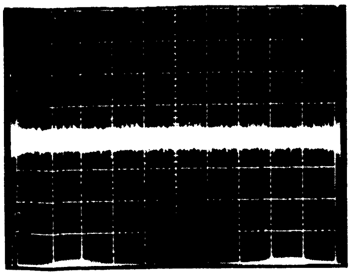
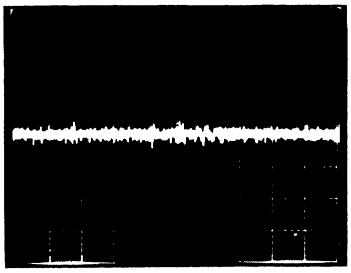
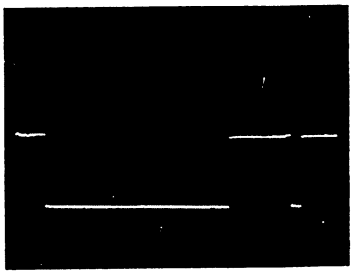
- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.

- This diagram is viewed from the mounted parts side.

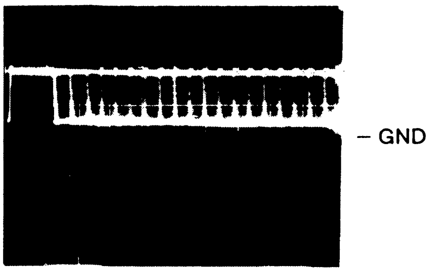
Waveforms

Note: The encircled numbers denote measuring point in the schematic disgram.

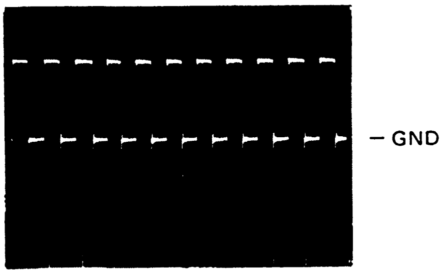
*2 FOCUS-IN: Press the key without loading a disc.

② TP1-Pin1: PLAY MODE (RF) 500mV/div 500nsec/div  	⑤ IC8202-Pin3: FOCUS-IN (*2) MODE (FODR) 1V/div 200msec/div  	⑦ IC8201-Pin3: PLAY MODE (SPDR) 1V/div 50msec/div 
② TP1-Pin1: TRACK SEARCH MODE (RF) 500mV/div 200μsec/div  	⑤ IC8202-Pin3: PLAY MODE (FODR) 1V/div 1msec/div  	⑦ IC8201-Pin3: TRACK SEARCH MODE (SPDR) 2V/div 50msec/div 
③ TP1-Pin6: PLAY MODE (FOER) 100mV/div 10msec/div  		⑧ IC8202-Pin9: PLAY MODE (CADR) 0.2V/div 2sec/div 
④ TP1-Pin2: PLAY MODE (TRER) 1V/div 1msec/div  	⑥ IC8202-Pin4: PLAY MODE (TRDR) 500mV/div 1msec/div  	⑧ IC8202-Pin9: TRACK SEARCH MODE (CADR) 2V/div 200msec/div 

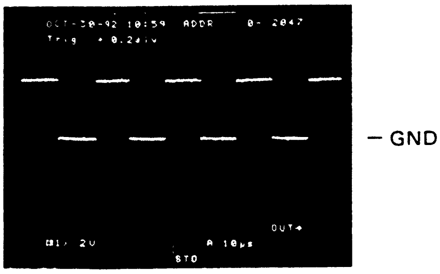
⑨ IC8151-Pin32: PLAY MODE (EFM)
2V/div 500nsec/div



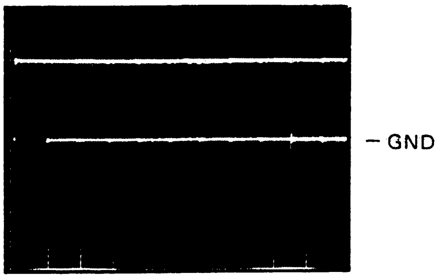
⑯ IC8301-Pin46: PLAY MODE (1kHz)
(BCK)
2V/div 500nsec/div



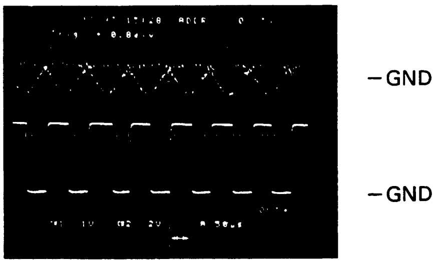
⑱ IC8301-Pin42: PLAY MODE (1kHz)
(LRCK)
2V/div 10μsec/div



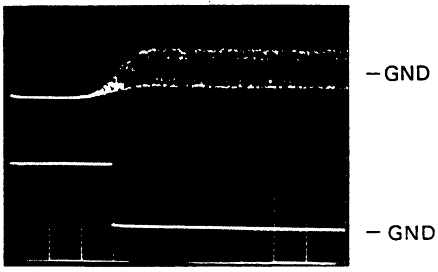
⑲ IC8301-Pin44: PLAY MODE (1kHz)
(PCMD)
2V/div 500nsec/div



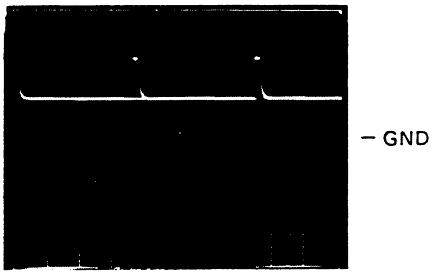
㉓ : TRACK SEARCH MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin26 (C. OUT)
2V/div 50μsec/div



㉔ : PLAY MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin30 (DFCT)
5V/div 200μsec/div



㉝ IC8301-Pin25: PLAY MODE (MDP)
2V/div 2μsec/div



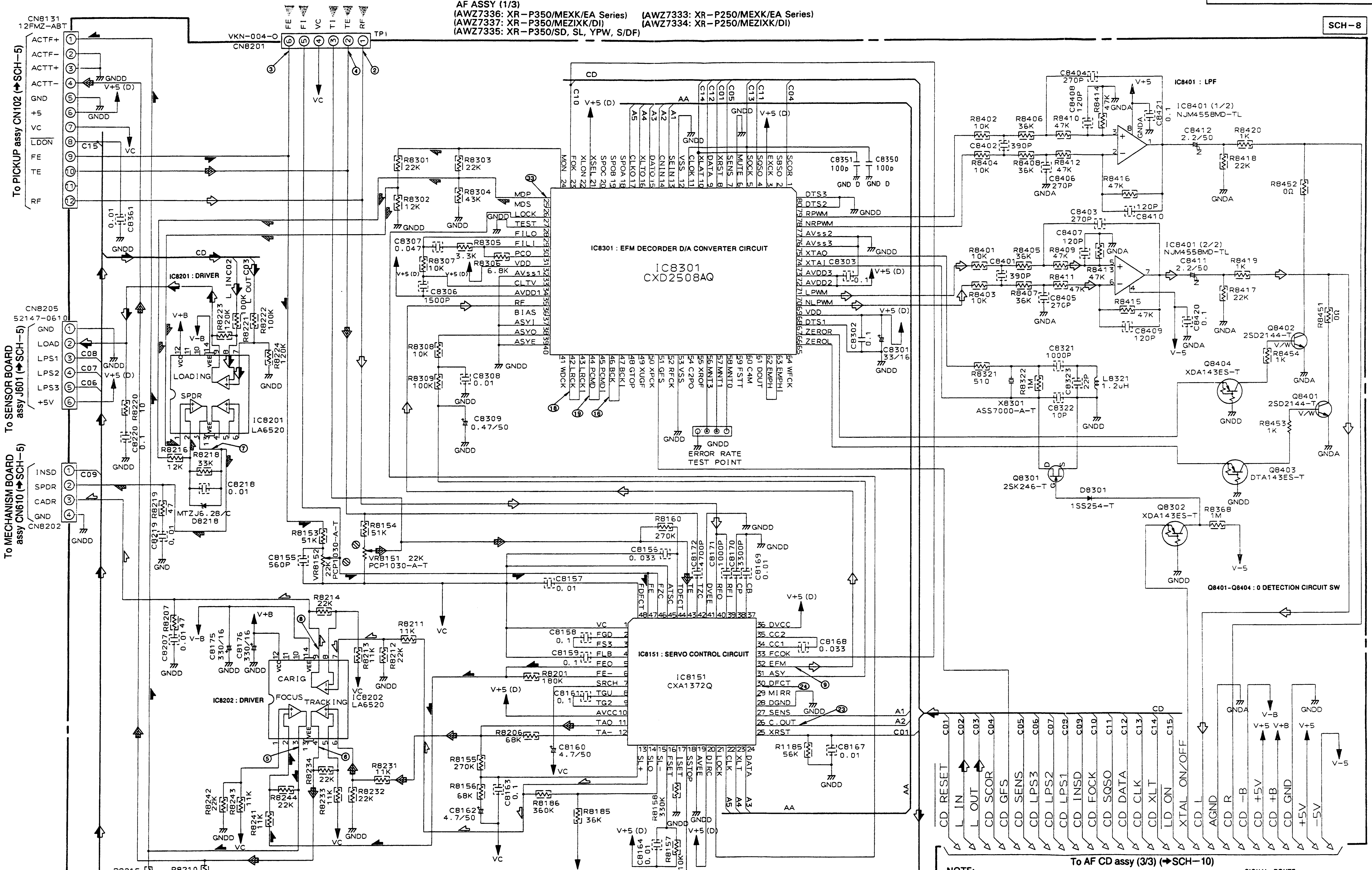
IC8151 (CXA1372Q)

Pin No.	Voltage [V]	Pin No.	Voltage [V]	Pin No.	Voltage [V]	Pin No.	Voltage [V]
1	2.5	13	2.5	25	5.0	37	2.0
2	2.5	14	2.5 to 2.6	26	0.1	38	2.7 to 2.8
3	2.5	15	2.5	27	4.9	39	2.5
4	2.5	16	0.8	28	0	40	3.2
5	2.4	17	1.3	29	0	41	0
6	2.5	18	2.5	30	0	42	2.5
7	2.6	19	0	31	0	43	2.5
8	2.5	20	5.0	32	2.7	44	2.5
9	2.5	21	5.0	33	5.0	45	2.5
10	5.0	22	4.9	34	1.3	46	2.5
11	2.5	23	5.0	35	1.0	47	2.5
12	2.5	24	4.9 to 5.0	36	5.0	48	2.4

IC8301 (CXD2508AQ)

Pin No.	Voltage [V]	Pin No.	Voltage [V]	Pin No.	Voltage [V]	Pin No.	Voltage [V]
1	0.1	21	5.0	41	2.4	61	2.0
2	0.1	22	0	42	2.4	62	0
3	5.0	23	5.0	43	2.4	63	0
4	0.1	24	5.0	44	2.4	64	2.5
5	4.9	25	2.6 to 2.7	45	2.4	65	0
6	0	26	0.1	46	1.8	66	0
7	2.2 to 2.5	27	5.0	47	1.8	67	0
8	5.0	28	0	48	0	68	5.0
9	4.9	29	2.7	49	4.9	69	2.5
10	5.0	30	2.6	50	1.2	70	2.5
11	4.9	31	2.6	51	4.9	71	5.0
12	0	32	5.0	52	2.5	72	5.0
13	4.9	33	0	53	0	73	2.4
14	0.1	34	2.7	54	0	74	2.4
15	4.9 to 5.0	35	5.0	55	4.9	75	0
16	5.0	36	2.7	56	4.5	76	0
17	4.9	37	0	57	0	77	2.5
18	0	38	0	58	0 to 0.3	78	2.5
19	0	39	2.5	59	2.8	79	0
20	0	40	0	60	1.4	80	0

AF ASSY (1/3)
(AWZ7336: XR−P350/MEXK/EA Series)
(AWZ7337: XR−P350/MEZIXK/DI)
(AWZ7335: XR−P350/SD, SL, YPW, S/DF)
(AWZ7333: XR−P250/MEXK/EA Series)
(AWZ7334: XR−P250/MEZIXK/DI)


1
2
3
4
5
6
A
B
C
D
CN8131 12FMZ-ABT
ACTF+
ACTF−
ACTT+
ACTT−
GND
+5
VC
LDON
FE
TE
RF
To PICKUP assy CN102 (➔SCH−5)
VKN-004-O CN8201
FE FI VC TI TE RF
TP1
CN8205 52147-0610
GND
LOAD
LPS1
LPS2
LPS3
+5V
To SENSOR BOARD assy J601 (➔SCH−5)
INSD
SPDR
CADR
GND
CN8202
To MECHANISM BOARD assy CN610 (➔SCH−5)
IC8201 : DRIVER
IC8201 LA6520
LOADING
SPDR
MTZJ6.2B/C D8218
IC8202 : DRIVER
IC8202 LA6520
CARIG
FOCUS
TRACKING
IC8301 : EFM DECORDER D/A CONVERTER CIRCUIT
IC8301 CXD2508AQ
ERROR RATE TEST POINT
IC8151 : SERVO CONTROL CIRCUIT
IC8151 CXA1372Q
VR8151 22K PCP1030-A-T
IC8401 : LPF
IC8401 (1/2) NJM4558MD-TL
IC8401 (2/2) NJM4558MD-TL
X8301 ASS7000-A-T
L8321 1.2uH
Q8301 2SK246-T
D8301 1SS254-T
Q8302 XDA143ES-T
Q8401 2SD2144-T
Q8402 2SD2144-T
Q8403 DTA143ES-T
Q8404 XDA143ES-T
Q8401–Q8404 : 0 DETECTION CIRCUIT SW
CD RESET
L IN
L OUT
CD SCOR
CD GFS
CD SENS
CD LPS3
CD LPS2
CD LPS1
CD INSD
CD FOCK
CD SQSO
CD DATA
CD CLK
CD XLT
LD ON
XTAL ON/OFF
CD L
AGND
CD R
CD −B
CD +5V
CD +B
CD GND
+5V
−5V
To AF CD assy (3/3) (➔SCH−10)

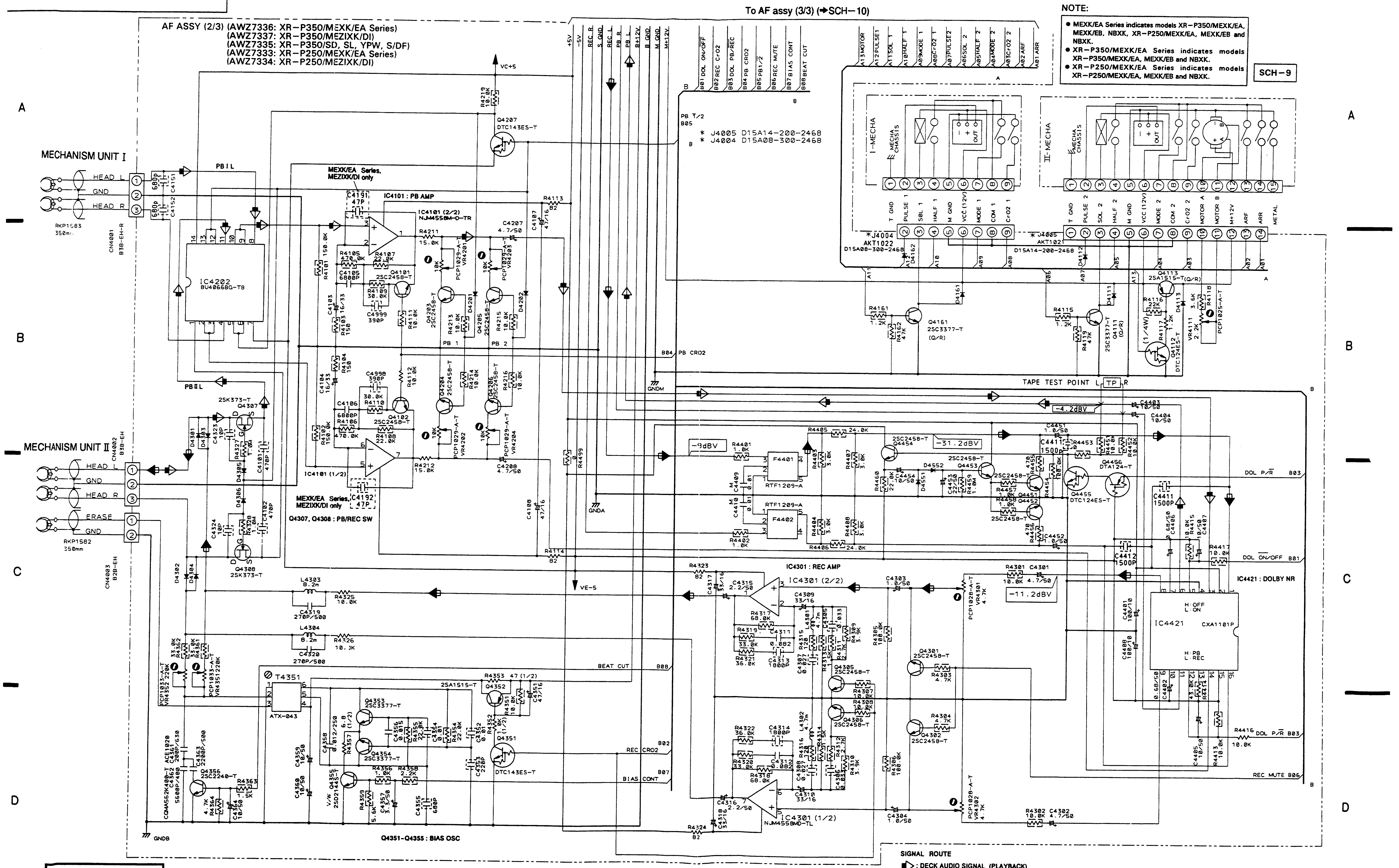
NOTE:
- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.

SIGNAL ROUTE
▨ : SPINDLE MOTOR ROUTE
▷ : CARRIAGE MOTOR ROUTE
⇨ : CD AUDIO SIGNAL ROUTE
▶ : FOCUS SERVO LOOP LINE
▨ : TRACKING SERVO LOOP LINE
➡ : LOADING MOTOR ROUTE

NOTE : VOLTAGE AND CURRENT
☐ or − V :
DC voltage (V) in PLAY mode unless otherwise noted.
⇦ mA or − mA :
DC current in PLAY mode unless otherwise noted.
Value in ( ) is DC current in STOP mode.

NOTE:
- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.

SCH−9


AF ASSY (2/3) (AWZ7336: XR−P350/MEXK/EA Series)
(AWZ7337: XR−P350/MEZIXK/DI)
(AWZ7335: XR−P350/SD, SL, YPW, S/DF)
(AWZ7333: XR−P250/MEXK/EA Series)
(AWZ7334: XR−P250/MEZIXK/DI)
To AF assy (3/3) (➔SCH−10)
+5V
−5V
REC R
S GND
REC L
PB R
PB L
B+12V
B GND
M GND
M+12V
B01 DOL ON/OFF
B02 REC CrO2
B03 DOL PB/REC
B04 PB CRO2
B05 PB1/2
B06 REC MUTE
B07 BIAS CONT
B08 BEAT CUT
A13MOTOR
A12PULSE1
A11SOL 1
A10HALF 1
A09MODE 1
A08CrO2 1
A07PULSE2
A06SOL 2
A05HALF 2
A04MODE 2
A03CrO2 2
A02ARF
A01 ARR
PB T/2
B05
* J4005 D15A14-200-2468
* J4004 D15A08-300-2468
I−MECHA
MECHA CHASSIS
II−MECHA
T GND
PULSE 1
SOL 1
HALF 1
M GND
VCC (12V)
MODE 1
CrO2 1
PULSE 2
HALF 2
MODE 2
COM 2
CrO2 2
MOTOR A
MOTOR B
M+12V
ARF
METAL
*J4004 AKT1022 D15A08-300-2468
*J4005 AKT1021 D15A14-200-2468
MECHANISM UNIT I
HEAD L
GND
HEAD R
RKP1583 350mm
CN4001 B3B-EH-R
PB I L
VC+5
R4219 10.0K
Q4207 DTC143ES-T
MEXK/EA Series, MEZIXK/DI only
C4191 47P
IC4101 : PB AMP
IC4101 (2/2) NJM4558M-D-TR
IC4202 BU4066BG-TB
R4113 82
C4207 4.7/50
R4211 15.0K
Q4101 2SC2458-T
PCP1029-A-T VR4201
PCP1029-A-T VR4203
Q4203 2SC2458-T
Q4205 2SC2458-T
D4201
D4202
PB 1
PB 2
B04 PB CRO2
Q4161 2SC3377-T (Q/R)
R4161 1.2K
R4162 4.7K
D4161
D4162
Q4111 2SC3377-T (Q/R)
Q4113 2SA1515-T(Q/R)
Q4112 DTC124ES-T
VR4111 2.2K PCP1025-A-T
TAPE TEST POINT L TP R
GNDM
PB II L
2SK373-T Q4307
MECHANISM UNIT II
HEAD L
GND
HEAD R
ERASE
GND
RKP1582 350mm
CN4002 B3B-EH
CN4003 B2B-EH
Q4308 2SK373-T
Q4307, Q4308 : PB/REC SW
IC4101 (1/2)
MEXK/EA Series, MEZIXK/DI only
C4192 47P
Q4102 2SC2458-T
Q4204 2SC2458-T
Q4206 2SC2458-T
PCP1029-A-T VR4202
PCP1029-A-T VR4204
R4212 15.0K
C4208 4.7/50
R4114 82
GNDA
−4.2dBV
−9dBV
−31.2dBV
F4401 RTF1209-A
F4402 RTF1209-A
Q4454 2SC2458-T
Q4453 2SC2458-T
Q4451 2SC2458-T
Q4452 2SC2458-T
Q4455 DTC124ES-T
Q4456 DTA124-T
DOL P/R B03
DOL ON/OFF B01
IC4421 : DOLBY NR
IC4421 CXA1101P
H: OFF L: ON
H: PB L: REC
IC4301 : REC AMP
IC4301 (2/2)
IC4301 (1/2) NJM4558MD-TL
−11.2dBV
PCP1028-A-T VR4301
PCP1028-A-T VR4302
Q4301 2SC2458-T
Q4302 2SC2458-T
Q4305 2SC2458-T
Q4306 2SC2458-T
R4416 DOL P/R B03
REC MUTE B06
VE-5
L4303 8.2m
L4304 8.2m
C4319 270P/500
C4320 270P/500
BEAT CUT B08
REC CRO2 B02
BIAS CONT B07
T4351 ATX-043
2SA1515-T
Q4352
Q4353 2SC3377-T
Q4354 2SC3377-T
Q4351 DTC143ES-T
Q4355 2SD2144S-T
Q4356 2SC2240-T
PCP1033-A-T VR4352 220K
PCP1033-A-T VR4351 220K
Q4351−Q4355 : BIAS OSC
GNDB

NOTE : VOLTAGE AND CURRENT

▭ or − V : DC voltage (V) in STOP mode unless otherwise noted.

⇦ mA or − mA : DC current in STOP mode unless otherwise noted.

SIGNAL ROUTE

▷ : DECK AUDIO SIGNAL (PLAYBACK)

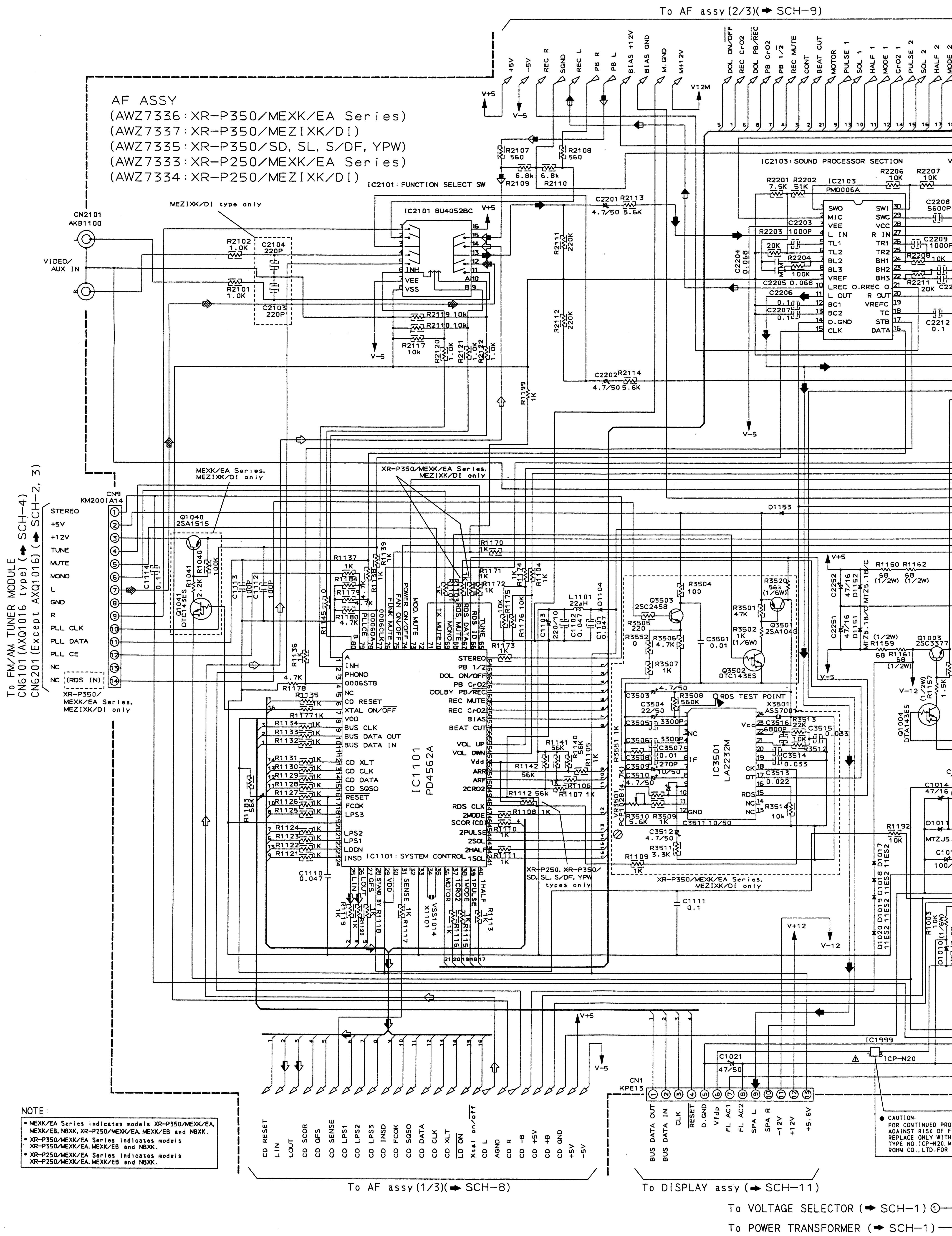
▶ : DECK AUDIO SIGNAL (RECORDING)

SCH−9

AF ASSY (2/3), CASSETTE MECHANISM UNIT

SCH−9

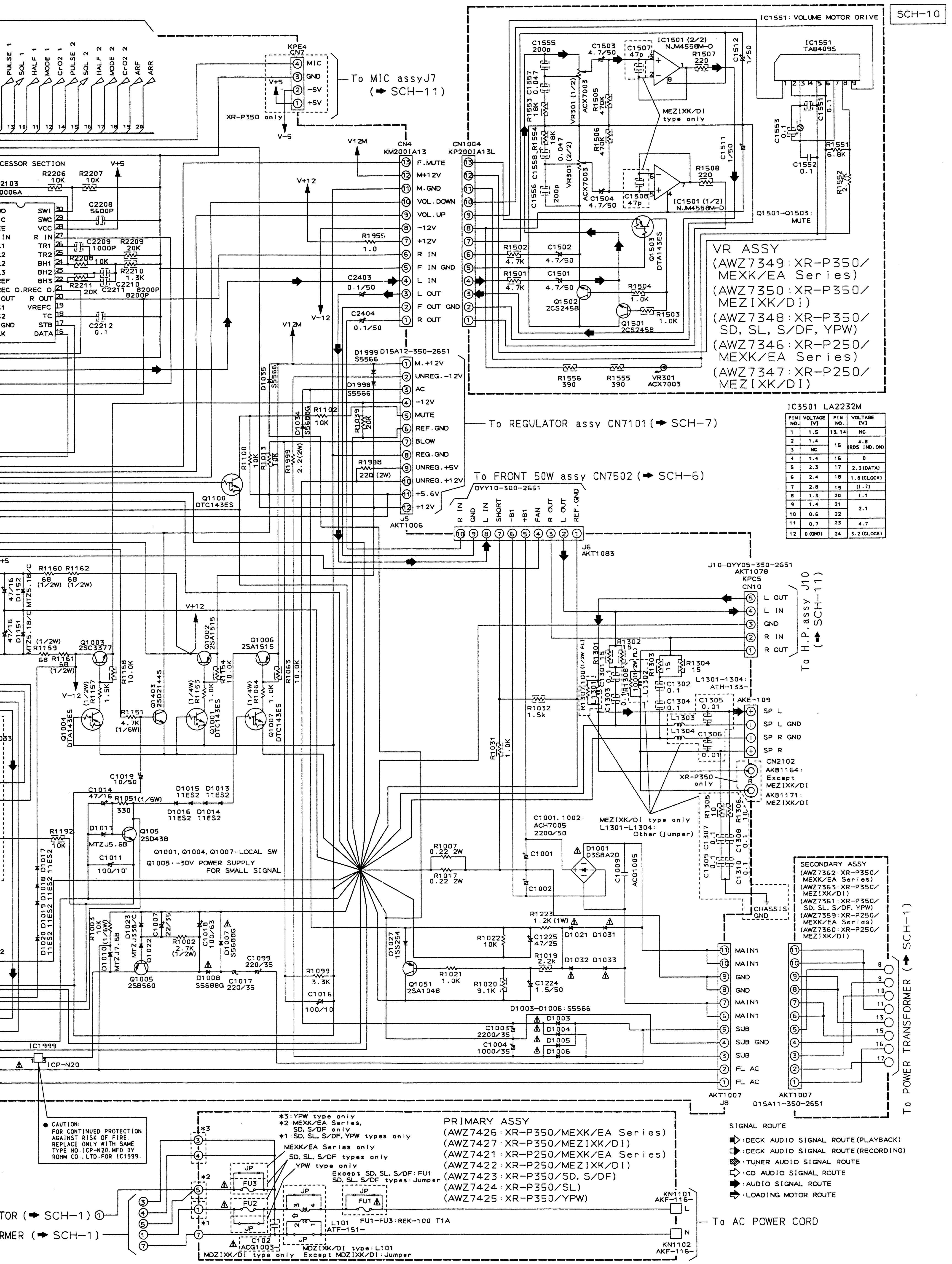
AF ASSY (2/3), CASSETTE MECHANISM UNIT


To AF assy(2/3)(➡ SCH-9)
AF ASSY
(AWZ7336:XR-P350/MEXK/EA Series)
(AWZ7337:XR-P350/MEZIXK/DI)
(AWZ7335:XR-P350/SD, SL, S/DF, YPW)
(AWZ7333:XR-P250/MEXK/EA Series)
(AWZ7334:XR-P250/MEZIXK/DI)
IC2101: FUNCTION SELECT SW
IC2101 BU4052BC
IC2103: SOUND PROCESSOR SECTION
IC2103 PM0006A
CN2101 AKB1100
VIDEO/AUX IN
MEZIXK/DI type only
To FM/AM TUNER MODULE
CN6101(AXQ1016 type)(➡ SCH-4)
CN6201(Except AXQ1016)(➡ SCH-2, 3)
CN9 KM200IA14
STEREO
+5V
+12V
TUNE
MUTE
MONO
L
GND
R
PLL CLK
PLL DATA
PLL CE
NC
NC (RDS IN)
XR-P350/MEXK/EA Series, MEZIXK/DI only
MEXK/EA Series, MEZIXK/DI only
Q1040 2SA1515
Q1041 DTC143ES
XR-P350/MEXK/EA Series, MEZIXK/DI only
IC1101 PD4562A
IC1101: SYSTEM CONTROL
XR-P250, XR-P350/SD, SL, S/DF, YPW types only
IC3501 LA2232M
RDS TEST POINT
X3501 ASS7001
Q3503 2SC2458
Q3501 2SA1048
Q3502 DTC143ES
XR-P350/MEXK/EA Series, MEZIXK/DI only
D1153
Q1003 2SC3377
Q1004 DTA143ES
IC1999 ICP-N20
CN1 KPE13
BUS DATA OUT
BUS DATA IN
CLK
RESET
D.GND
Vfdp
FL AC1
FL AC2
SPA L
SPA R
−12V
+12V
+5.6V
CD RESET
LIN
LOUT
CD SCOR
CD GFS
CD SENSE
CD LPS1
CD LPS2
CD LPS3
CD INSD
CD FCOK
CD SQSO
CD DATA
CD CLK
CD XLT
LD ON
Xtal on/off
CD L
AGND
CD R
CD −B
CD +5V
CD +B
CD GND
+5V
−5V
To AF assy(1/3)(➡ SCH-8)
To DISPLAY assy(➡ SCH-11)
To VOLTAGE SELECTOR (➡ SCH-1) ①
To POWER TRANSFORMER (➡ SCH-1)
CAUTION:
FOR CONTINUED PRO
AGAINST RISK OF F
REPLACE ONLY WITH
TYPE NO. ICP-N20, M
ROHM CO., LTD. FOR

NOTE:

- MEXK/EA Series indicates models XR-P350/MEXK/EA, MEXK/EB, NBXK, XR-P250/MEXK/EA, MEXK/EB and NBXK.
- XR-P350/MEXK/EA Series indicates models XR-P350/MEXK/EA, MEXK/EB and NBXK.
- XR-P250/MEXK/EA Series indicates models XR-P250/MEXK/EA, MEXK/EB and NBXK.

SCH−10 AF ASSY (3/3), VR ASSY, SECONDARY ASSY, PRIMARY ASSY


SCH-10
IC1551: VOLUME MOTOR DRIVE
IC1501 (2/2) NJM4558M-D
IC1501 (1/2) NJM4558M-D
IC1551 TA8409S
MEZIXK/DI type only
Q1501-Q1503: MUTE
VR ASSY
(AWZ7349: XR-P350/MEXK/EA Series)
(AWZ7350: XR-P350/MEZIXK/DI)
(AWZ7348: XR-P350/SD, SL, S/DF, YPW)
(AWZ7346: XR-P250/MEXK/EA Series)
(AWZ7347: XR-P250/MEZIXK/DI)
KPE4 CN7
To MIC assy J7 (➡ SCH-11)
XR-P350 only
CN4 KM200IA13
CN1004 KP200IA13L
F.MUTE
M+12V
M.GND
VOL.DOWN
VOL.UP
-12V
+12V
R IN
F IN GND
L IN
L OUT
F OUT GND
R OUT
D1999 D15A12-350-2651
M.+12V
UNREG.-12V
AC
-12V
MUTE
REF.GND
BLOW
REG.GND
UNREG.+5V
UNREG.+12V
+5.6V
+12V
J5 AKT1006
To REGULATOR assy CN7101 (➡ SCH-7)
To FRONT 50W assy CN7502 (➡ SCH-6)
DYY10-300-2651
J6 AKT1083
J10-DYY05-350-2651 AKT1078 KPC5 CN10
To H.P. assy J10 (➡ SCH-11)
L1301-L1304: ATH-133-
AKE-109
SP L
SP L GND
SP R GND
SP R
CN2102 AKB1164: Except MEZIXK/DI
AKB1171: MEZIXK/DI
XR-P350 only
C1001, 1002: ACH7005 2200/50
MEZIXK/DI type only L1301-L1304: Other (jumper)
Q1001, Q1004, Q1007: LOCAL SW
Q1005: -30V POWER SUPPLY FOR SMALL SIGNAL
SECONDARY ASSY
(AWZ7362: XR-P350/MEXK/EA Series)
(AWZ7363: XR-P350/MEZIXK/DI)
(AWZ7361: XR-P350/SD, SL, S/DF, YPW)
(AWZ7359: XR-P250/MEXK/EA Series)
(AWZ7360: XR-P250/MEZIXK/DI)
CHASSIS GND
D1003-D1006: S5566
MAIN1
GND
SUB
SUB GND
FL AC
AKT1007 J8
AKT1007 D15A11-350-2651
To POWER TRANSFORMER (➡ SCH-1)
IC1999 ICP-N20
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N20, MFD BY ROHM CO., LTD. FOR IC1999.
*3: YPW type only
*2: MEXK/EA Series, SD, S/DF only
*1: SD, SL, S/DF, YPW types only
MEXK/EA Series only
SD, SL, S/DF types only
YPW type only
Except SD, SL, S/DF: FU1
SD, SL, S/DF types: Jumper
PRIMARY ASSY
(AWZ7426: XR-P350/MEXK/EA Series)
(AWZ7427: XR-P350/MEZIXK/DI)
(AWZ7421: XR-P250/MEXK/EA Series)
(AWZ7422: XR-P250/MEZIXK/DI)
(AWZ7423: XR-P350/SD, S/DF)
(AWZ7424: XR-P350/SL)
(AWZ7425: XR-P350/YPW)
FU1-FU3: REK-100 T1A
L101 ATF-151-
C102 ACG1003
MDZIXK/DI type only
MDZIXK/DI type: L101 Except MDZIXK/DI: Jumper
KN1101 AKF-116-
KN1102 AKF-116-
To AC POWER CORD
TOR (➡ SCH-1)
RMER (➡ SCH-1)
SIGNAL ROUTE
: DECK AUDIO SIGNAL ROUTE (PLAYBACK)
: DECK AUDIO SIGNAL ROUTE (RECORDING)
: TUNER AUDIO SIGNAL ROUTE
: CD AUDIO SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
: LOADING MOTOR ROUTE

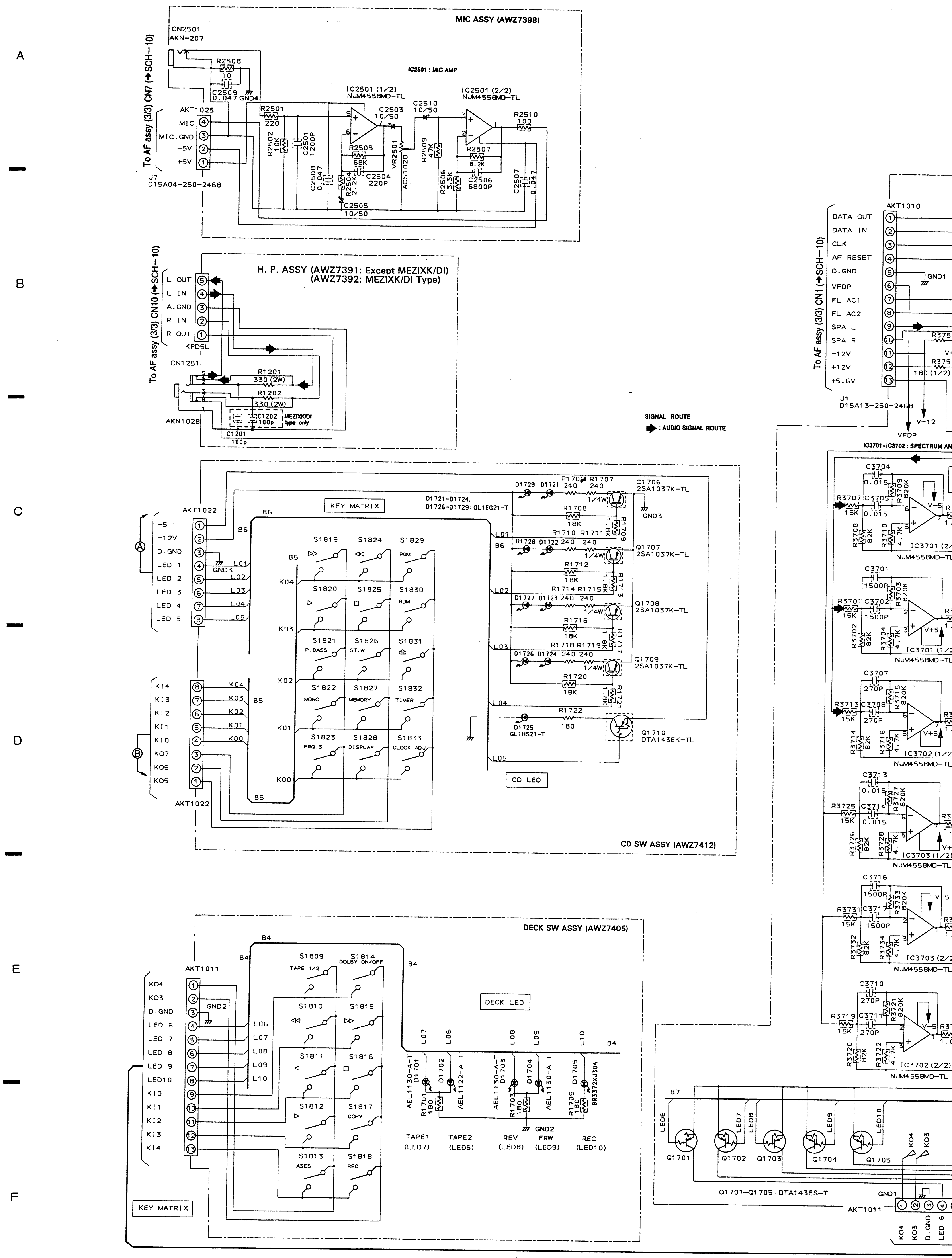
IC3501 LA2232M

PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]
1	1.5	13, 14	NC
2	1.4	15	4.8 (RDS IND.ON)
3	NC		
4	1.4	16	0
5	2.3	17	2.3 (DATA)
6	2.4	18	1.8 (CLOCK)
7	2.8	19	(1.7)
8	1.3	20	1.1
9	1.4	21	2.1
10	0.6	22	
11	0.7	23	4.7
12	0 (GND)	24	3.2 (CLOCK)

AF ASSY (3/3), VR ASSY, SECONDARY ASSY, PRIMARY ASSY

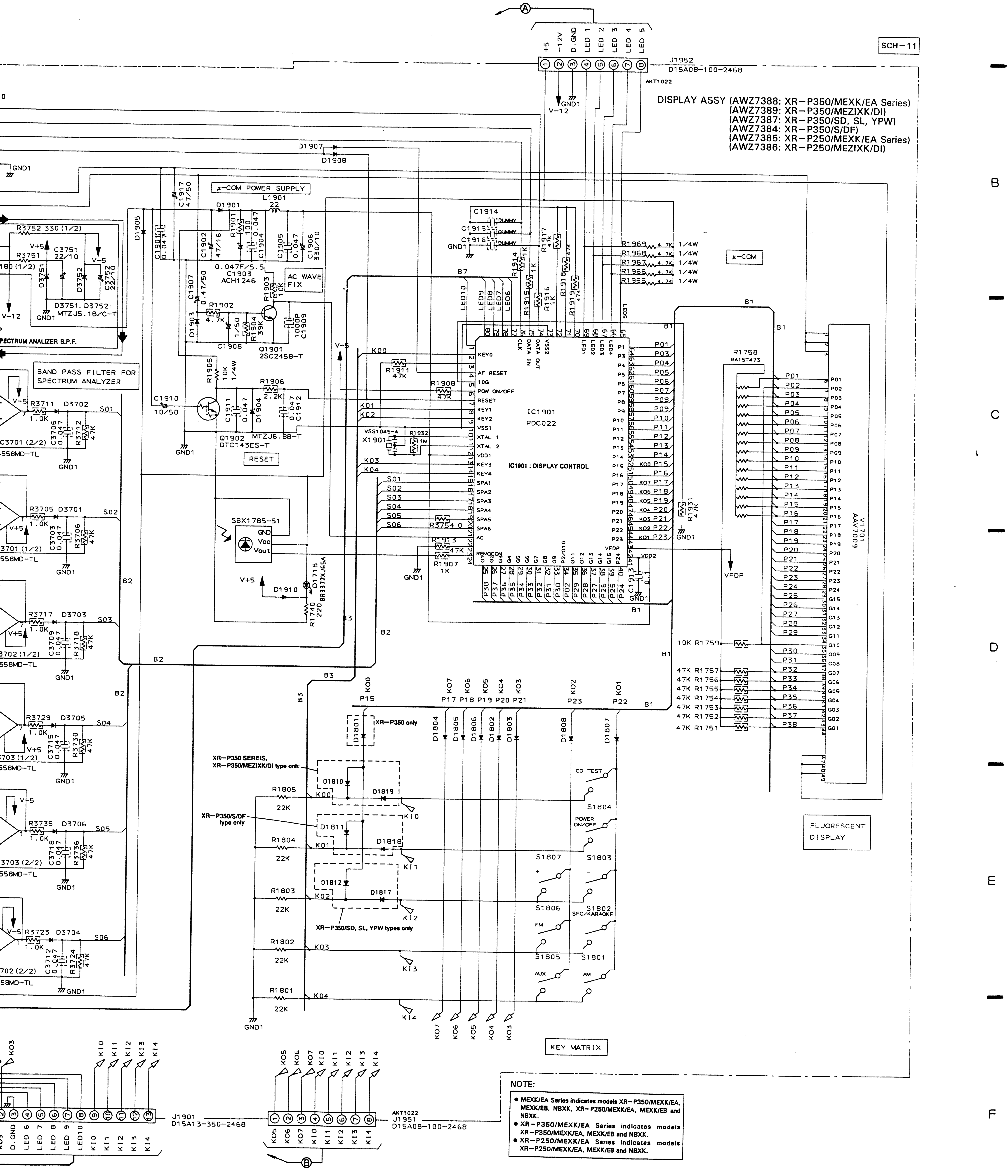
SCH-10

8.7 DISPLAY ASSY, H. P. ASSY, MIC ASSY, DECK SW ASSY AND CD SW ASSY


A
B
C
D
E
F
MIC ASSY (AWZ7398)
CN2501
AKN-207
To AF assy (3/3) CN7 (➔SCH-10)
AKT1025
MIC
MIC.GND
-5V
+5V
J7
D15A04-250-2468
R2508 10
C2509 0.047
GND4
IC2501 : MIC AMP
IC2501 (1/2) NJM4558MD-TL
IC2501 (2/2) NJM4558MD-TL
R2501 220
R2502 10K
C2501 1200P
C2503 10/50
C2510 10/50
R2505 68K
R2504 2.2K
C2504 220P
C2508 0.047
C2505 10/50
VR2501 ACS1028
R2509 47K
R2506 3.3K
R2507 8.2K
C2506 6800P
R2510 100
C2507 0.047
H. P. ASSY (AWZ7391: Except MEZIXK/DI) (AWZ7392: MEZIXK/DI Type)
To AF assy (3/3) CN10 (➔SCH-10)
L OUT
L IN
A.GND
R IN
R OUT
KPD5L
CN1251
R1201 330 (2W)
R1202 330 (2W)
C1202 100p
MEZIXK/DI type only
C1201 100p
AKN1028
SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE
CD SW ASSY (AWZ7412)
AKT1022
+5
-12V
D.GND
LED 1
LED 2
LED 3
LED 4
LED 5
GND3
KI4
KI3
KI2
KI1
KI0
KO7
KO6
KO5
KEY MATRIX
D1721-D1724, D1726-D1729: GL1EG21-T
S1819 S1824 S1829 PGM
S1820 S1825 S1830 RDM
S1821 P.BASS S1826 ST.W S1831
S1822 MONO S1827 MEMORY S1832 TIMER
S1823 FRQ.S S1828 DISPLAY S1833 CLOCK ADJ
K04 K03 K02 K01 K00
B4 B5 B6
L01 L02 L03 L04 L05
D1729 D1721 P1706 R1707 240 240 1/4W
Q1706 2SA1037K-TL
R1708 18K
R1709 1.8K
R1710 R1711
D1728 D1722 240 240
Q1707 2SA1037K-TL
R1712 18K
R1713 1.8K
R1714 R1715
D1727 D1723 240 240
Q1708 2SA1037K-TL
R1716 18K
R1717 1.8K
R1718 R1719
D1726 D1724 240 240
Q1709 2SA1037K-TL
R1720 18K
R1721 1.8K
R1722 180
D1725 GL1HS21-T
Q1710 DTA143EK-TL
CD LED
DECK SW ASSY (AWZ7405)
AKT1011
KO4
KO3
D.GND
LED 6
LED 7
LED 8
LED 9
LED10
KI0
KI1
KI2
KI3
KI4
GND2
L06 L07 L08 L09 L10
S1809 TAPE 1/2
S1814 DOLBY ON/OFF
S1810 S1815
S1811 S1816
S1812 S1817 COPY
S1813 ASES S1818 REC
DECK LED
D1701 AEL1130-A-T
D1702 AEL1122-A-T
D1703 AEL1130-A-T
D1704 AEL1130-A-T
D1705 BR3372XJ30A
R1701 180
R1703 180
R1705 180
TAPE1 (LED7)
TAPE2 (LED6)
REV (LED8)
FRW (LED9)
REC (LED10)
KEY MATRIX
AKT1010
DATA OUT
DATA IN
CLK
AF RESET
D.GND
VFDP
FL AC1
FL AC2
SPA L
SPA R
-12V
+12V
+5.6V
GND1
To AF assy (3/3) CN1 (➔SCH-10)
J1
D15A13-250-2468
V-12
VFDP
IC3701-IC3702 : SPECTRUM AN
C3704 0.015
R3707 15K
C3705 0.015
R3709 820K
R3708 82K
R3710 4.7K
IC3701 (2/
NJM4558MD-TL
C3701 1500P
R3701 15K
C3702 1500P
R3703 820K
R3702 82K
R3704 4.7K
IC3701 (1/2
C3707 270P
R3713 15K
C3708 270P
R3715 820K
R3714 82K
R3716 4.7K
IC3702 (1/2
C3713 0.015
R3725 15K
C3714 0.015
R3727 820K
R3726 82K
R3728 4.7K
IC3703 (1/2)
C3716 1500P
R3731 15K
C3717 1500P
R3733 820K
R3732 82K
R3734 4.7K
IC3703 (2/2
C3710 270P
R3719 15K
C3711 270P
R3721 820K
R3720 82K
R3722 4.7K
IC3702 (2/2)
NJM4558MD-TL
B7
LED6 LED7 LED8 LED9 LED10
Q1701 Q1702 Q1703 Q1704 Q1705
Q1701~Q1705 : DTA143ES-T
GND1
AKT1011
KO4 KO3 D.GND LED 6

SCH−11 DISPLAY ASSY, H. P. ASSY, MIC ASSY, DECK SW ASSY, CD SW ASSY

DISPLAY ASSY (AWZ7388: XR−P350/MEXK/EA Series)
(AWZ7389: XR−P350/MEZIXK/DI)
(AWZ7387: XR−P350/SD, SL, YPW)
(AWZ7384: XR−P350/S/DF)
(AWZ7385: XR−P250/MEXK/EA Series)
(AWZ7386: XR−P250/MEZIXK/DI)


SCH−11
J1952
D15A08−100−2468
AKT1022
+5
−12V
D. GND
LED 1
LED 2
LED 3
LED 4
LED 5
μ−COM POWER SUPPLY
AC WAVE FIX
RESET
SPECTRUM ANALIZER B.P.F.
BAND PASS FILTER FOR SPECTRUM ANALYZER
SBX1785−51
IC1901
PDC022
IC1901 : DISPLAY CONTROL
μ−COM
R1758
RA15T473
V1701
AAV7009
FLUORESCENT DISPLAY
XR−P350 only
XR−P350 SEREIS, XR−P350/MEZIXK/DI type only
XR−P350/S/DF type only
XR−P350/SD, SL, YPW types only
CD TEST
S1804
POWER ON/OFF
S1807
S1803
S1806
S1802
SFC/KARAOKE
FM
S1805
S1801
AUX
AM
KEY MATRIX
J1901
D15A13−350−2468
J1951
D15A08−100−2468
A
B
C
D
E
F

NOTE:
- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.

DISPLAY ASSY, H. P. ASSY, MIC ASSY,
DECK SW ASSY, CD SW ASSY

9. ADJUSTMENTS

9.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1−1.
- For MEXK/EA, MEXK/EB, NBXK, SD, SL and YPW types (AXQ7013, AXQ1012 and AXQ3213)

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	98MHz	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front End Sensitivity	98	0−30	98MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*

- For MEZIXK/DI type (AXQ7014 and AXQ3214)

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	98MHz	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front End Sensitivity	106	0−30	106MHz	L6104 L6105 L6102 T6101	After adjusting L6104 and L6105 so that the DC voltage between IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level, adjust T6101 and L6102.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102 and between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*
- *Adjustment sequence : L6104 → L6105 → L6102 → T6101*

- **For S/DF type (AXQ1016)**

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	83 Non modulation	80 or more	83MHz	L6109	Adjust so that the DC voltage between Pin 4 and Pin 28 of IC6101 becomes 0V±50mV. (Both ends of R6141)
2	Front End Sensitivity	83	0−30	83MHz	L6104 L6102 T6101	Adjust so that the DC voltage of the Pin12 of IC6101 (S-meter) becomes at maximum level.
3	TUNED IND. Lighting Level	83	15±2	83MHz	VR6101	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102, L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*

AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1−1.
- **For MEXK/EA, MEXK/EB, NBXK, SD, SL, YPW and MEZIXK/DI types (AXQ7013, AXQ3213, AXQ1012, AXQ7014 and AXQ3214)**

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999 *1	47±2	999kHz *1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

Note:

- *When SD, SL and YPW types are used, set the AM frequency step to 10 kHz.*

**1: For the area using 10kHz step, frequencies should be 1000 kHz.*

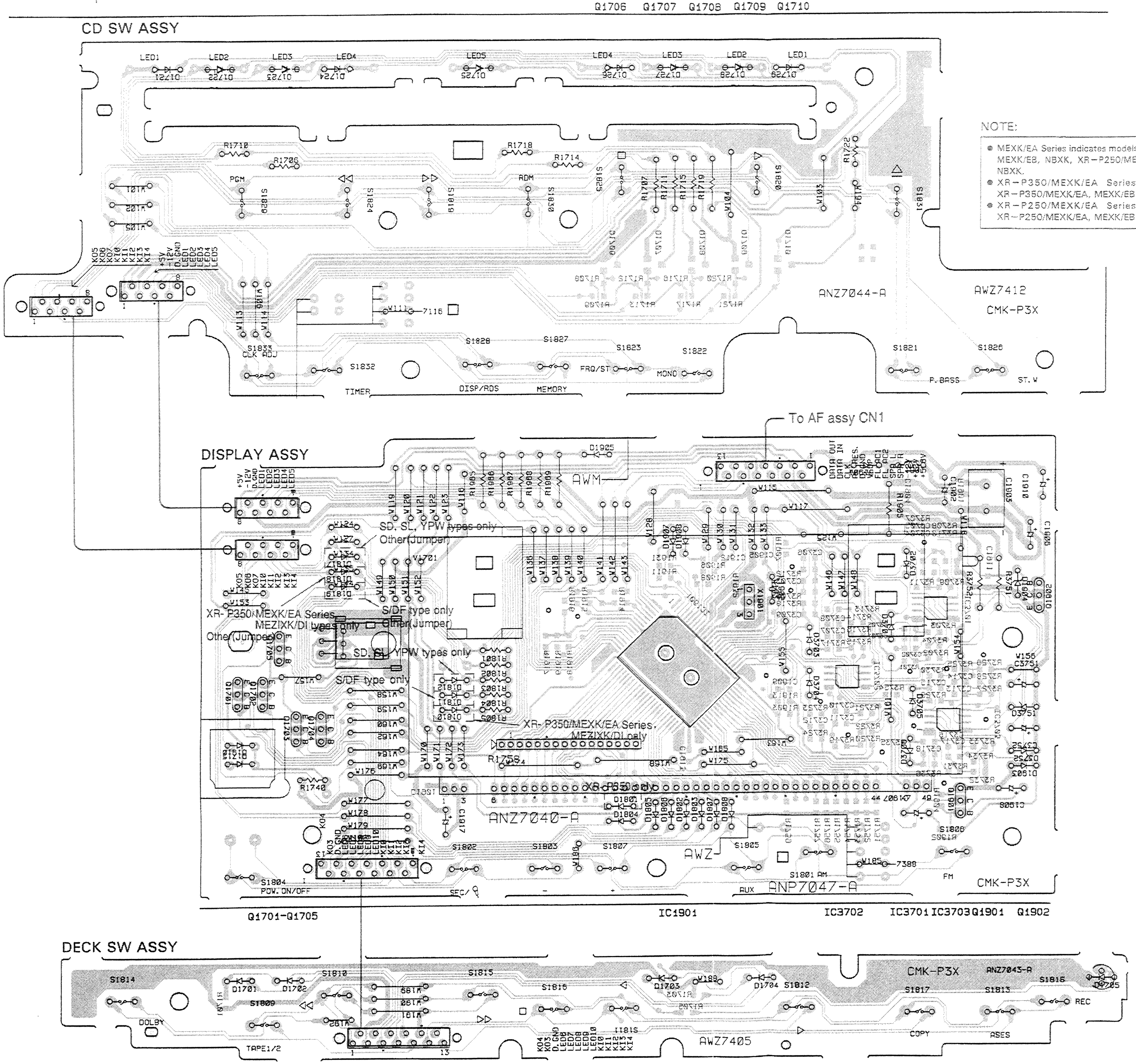
- **For S/DF type (AXQ1016)**

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999	47±2	999kHz	VR6102	Adjust so that the indicator of TUNED IND. starts to light up.

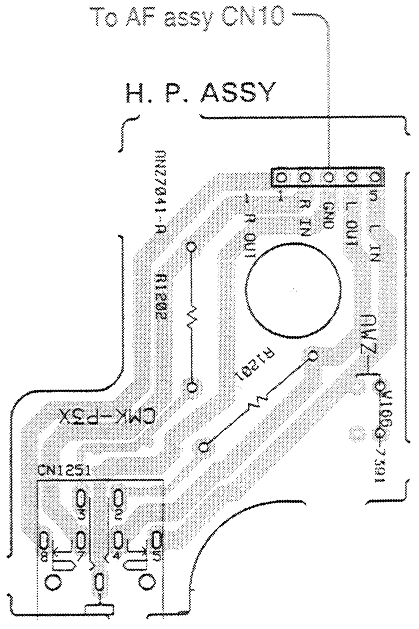
- This diagram is viewed from the mounted parts side.

NOTE:

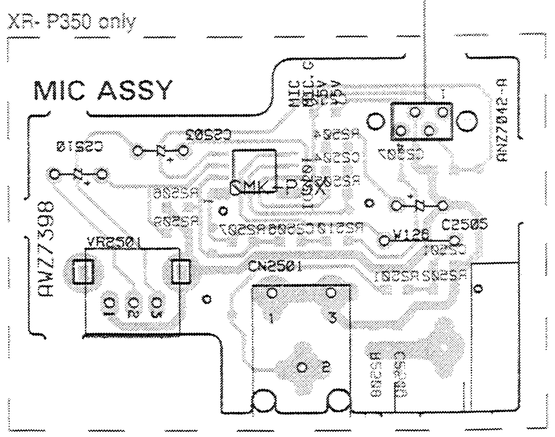
- MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB, NBXK, XR−P250/MEXK/EA, MEXK/EB and NBXK.
- XR−P350/MEXK/EA Series indicates models XR−P350/MEXK/EA, MEXK/EB and NBXK.
- XR−P250/MEXK/EA Series indicates models XR−P250/MEXK/EA, MEXK/EB and NBXK.


Q1706 Q1707 Q1708 Q1709 Q1710
CD SW ASSY
LED1 LED2 LED3 LED4 LED5 LED4 LED3 LED2 LED1
D1721 D1722 D1723 D1724 D1725 D1726 D1727 D1728 D1729
R1710 R1706 R1718 R1714 R1722
PGM RDM
S1820 S1824 S1819 S1830 S1825 S1828 S1831
R1707 R1711 R1715 R1719 V104 V103 V101
Q1706 Q1707 Q1708 Q1709 Q1710
K05 K06 K07 K10 K11 K12 K13 K14
+5V -12V D.GND LED1 LED2 LED3 LED4 LED5
V113 V114 V111 7116
ANZ7044-A
AWZ7412
CMK-P3X
S1833 CLK ADJ
S1832 TIMER
S1828 DISP/RDS
S1827 MEMORY
S1823 FRQ/ST
S1822 MONO
S1821 P.BASS
S1826 ST.W
To AF assy CN1
DISPLAY ASSY
+5V -12V D.GND LED1 LED2 LED3 LED4 LED5
D1905
DATA OUT DATA IN CLK ...
W115 W117
SD, SL, YPW types only
Other(Jumper)
S/DF type only
Other(Jumper)
XR-P350/MEXK/EA Series MEZIXK/DI types only
Other(Jumper)
SD, SL, YPW types only
S/DF type only
XR-P350/MEXK/EA Series, MEZIXK/DI only
XR-P350 only
R1740
R1755
W176 W177 W178 W179 W180
ANZ7040-A
AWM
AWZ
ANP7047-A
CMK-P3X
S1804 POW. ON/OFF
S1802 SEC/
S1803 S1807 S1805
S1801 AM FM
AUX
S1806
W185 7388
C1910 C1906 C1911 C1917
Q1901 Q1902
Q1701-Q1705 IC1901 IC3702 IC3701 IC3703 Q1901 Q1902
DECK SW ASSY
S1814 DOLBY
D1701 D1702
S1810 S1809 TAPE1/2
S1815 S1816
D1703 D1704
S1812 S1817 COPY
S1813 ASES
S1816 REC
D1705
CMK-P3X
ANZ7043-A
AWZ7405
K04 K03 D.GND LED6 LED7 LED8 LED9 LED10 K11 K12 K13 K14
1 13

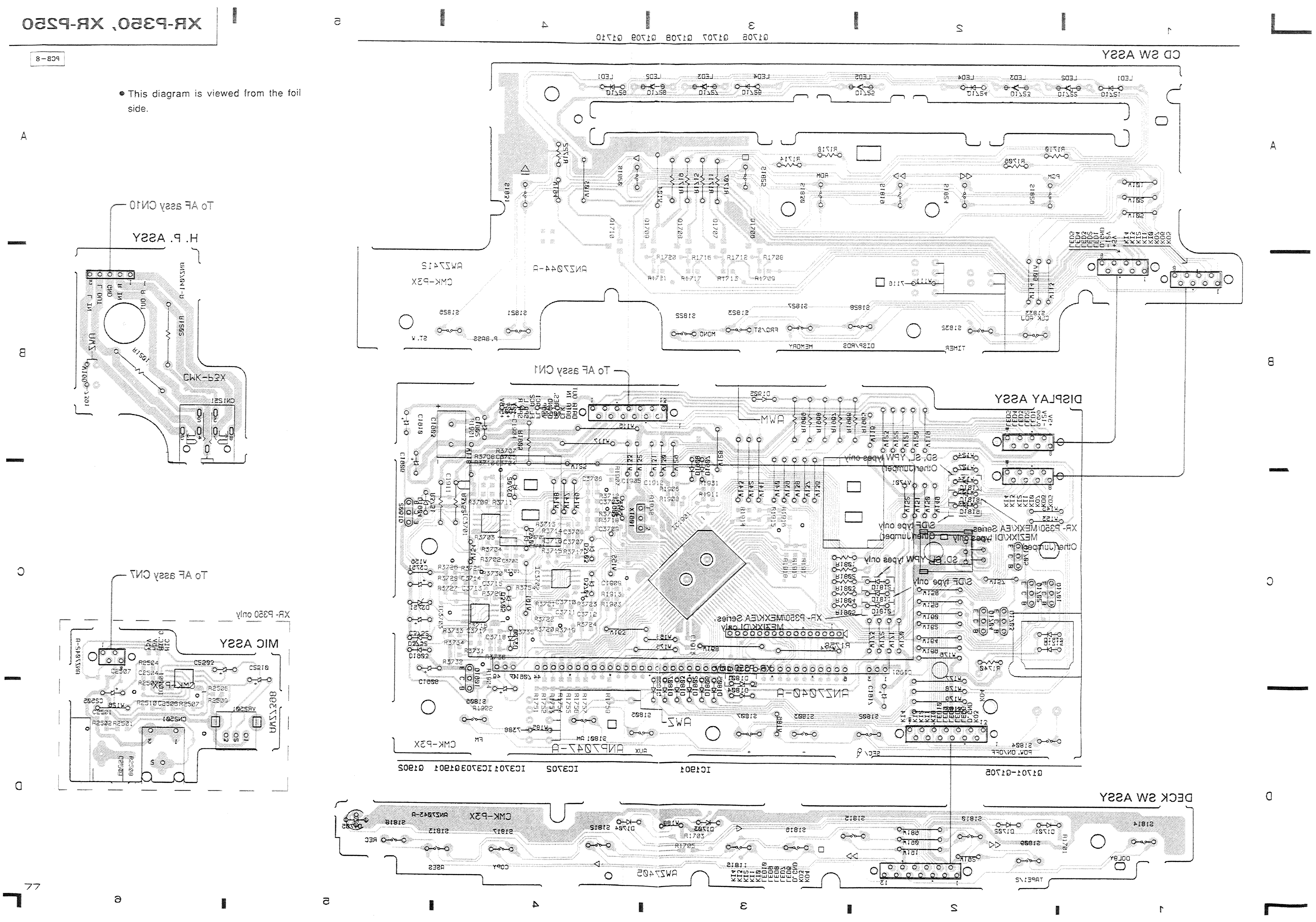
To AF assy CN10


H. P. ASSY
ANZ7041-A
L IN L OUT GND R IN R OUT
R1202 R1201
AWZ
CMK-P3X
CN1251
W1169 7391

To AF assy CN7


XR- P350 only
MIC ASSY
MIC G MIC V
ANZ7042-A
AWZ7398
CMK-P3X
VR2501
CN2501
C2505
W126

- This diagram is viewed from the foil side.


XR-P350, XR-P250
PCB-8
CD SW ASSY
H. P. ASSY
To AF assy CN10
DISPLAY ASSY
To AF assy CN1
MIC ASSY
To AF assy CN7
XR-P350 only
DECK SW ASSY
A
B
C
D
1
2
3
4
5
6

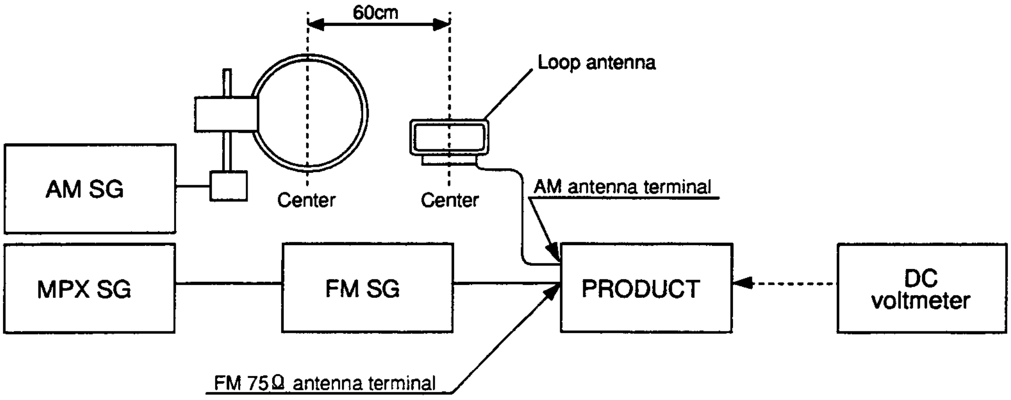
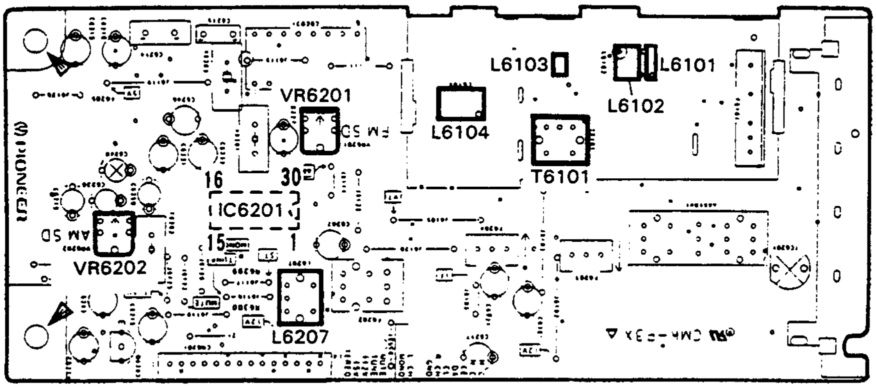
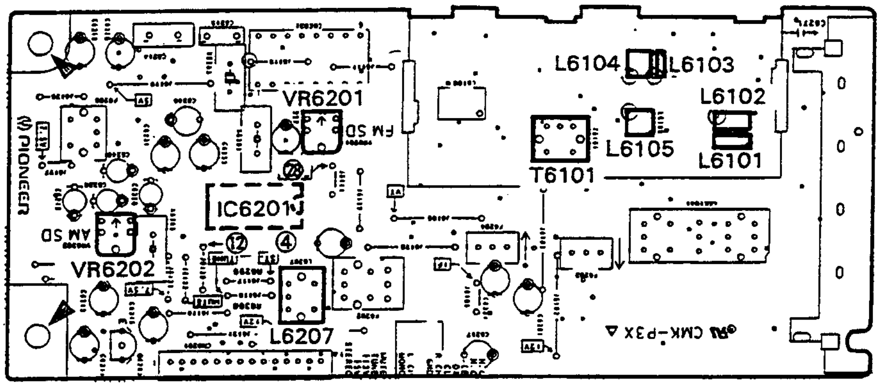

60cm
Loop antenna
AM SG
Center
Center
AM antenna terminal
MPX SG
FM SG
PRODUCT
DC voltmeter
FM 75Ω antenna terminal

Fig. 1－1　AM and FM Adjustment Wiring Diagram

FM／AM TUNER MODULE (AXQ7013, AXQ3213 and AXQ1012)


L6103
L6101
L6102
VR6201
FM SD
L6104
T6101
16
30
IC6201
15
1
AM SD
VR6202
L6207
PIONEER
CMK-P3X

FM／AM TUNER MODULE (AXQ7014 and AXQ3214)


L6104
L6103
L6102
VR6201
FM SD
L6105
L6101
T6101
㉘
IC6201
AM SD
⑫
④
VR6202
L6207
PIONEER
CMK-P3X

FM／AM TUNER MODULE (AXQ1016)

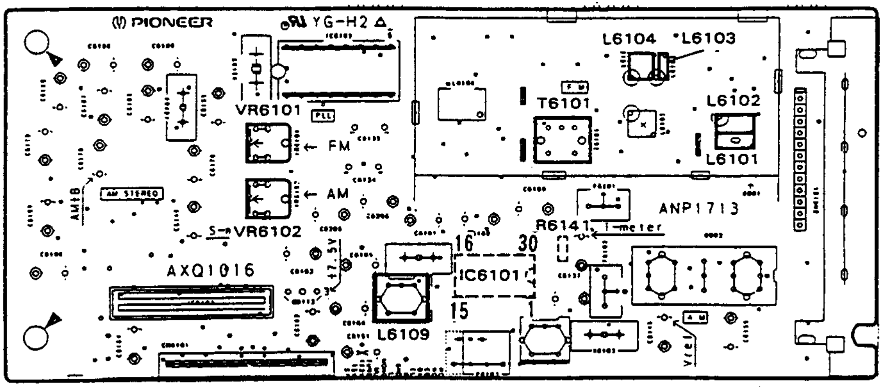

PIONEER
YG-H2
L6104
L6103
T6101
L6102
VR6101
FM
L6101
AM
ANP1713
S-VR6102
R6141
T-meter
16
30
IC6101
15
1
AXQ1016
L6109
Vref

Fig. 1－2　Adjustment Points

9.2 POWER AMP MODULE SECTION (Refer to Fig. 2−1.)

1. Handling Precautions

- Since the heat sink and transistor metallic parts are connected to the Front Amp output, make sure they do not contact the GND (chassis) or other circuits.
- Since there is residual high voltage in the Power Amp Module ±B1 (FRONT 50W ASSY) and ±B2 (REGULATOR ASSY) even when the power is OFF, caution should be exercised. (If necessary, the voltage should be discharged).
- When handling the Power Amp Module, make sure you do not touch the fan motor blade.

2. Adjustment and Confirmation of Idle Current

- Basically, the idle current needs to be confirmed when replacing a power transistor, driver transistor, or bias transistor, or when the entire split board Assy of the Power Amp Module has been replaced.
- Make sure the heat sink has cooled sufficiently before measuring the idle current. (Temperature should be the same as room temperature; 25°C is ideal, if possible.)
- Idle current stipulated value: 3−100mA.

■ Front Amp Side (FRONT 50W ASSY)

Step	Measurement	Item	Remarks
1	Lch side	Insert a resistor (0.22Ω, 3W or more) in series in the connector CN7502 +B1 (or −B1) line (terminal No. 5 or 6). (Refer to Fig. 2−2.)	For measuring voltage at both sides of resistor
2		Short both sides of C7524.	Do not operate Rch side.
3		Turn the power ON, wait 6 seconds, and then measure the resistance voltage in Step 1.	Lch Idle current I=V/0.22
4	Rch side	● Same as Step 1 above. ● Short both sides of C7523.	Do not operate Lch side.
5		Turn the power ON under the above conditions, and after 6 seconds measure the resistance voltage in Step 1.	
6	——	If the measured idle current is greater than 100mA, perform the following procedure.	
7	Lch side	Short between the Point Ⓐ pattern in Fig. 2−3 using solder.	Connect R7517 to R7515 in a parallel circuit.
8	Rch side	Short between the Point Ⓑ pattern in Fig. 2−3 using solder.	Connect R7518 to R7516 in a parallel circuit.
9	——	After performing Steps 7 and 8, remeasure the idle current and confirm that it is below 100mA.	
10	——	If the measured idle current is below 3mA, perform the following procedure.	
11	Lch side	Short between the Point Ⓒ pattern in Fig. 2−3 using solder.	Connect R7551 to R7519 in a parallel circuit.
12	Rch side	Short between the Point Ⓓ pattern in Fig. 2−3 using solder.	Connect R7552 to R7520 in a parallel circuit.
13	——	After performing Steps 11 and 12, remeasure the idle current and confirm that it is greater than 3mA. (Within 3−100mA)	

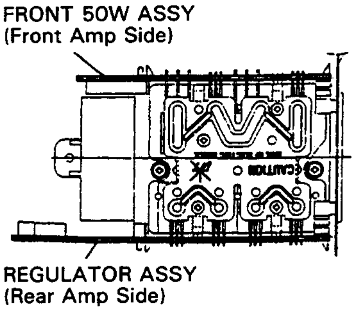


Fig. 2−1 Power Amp Module (POWER MOD. F50)

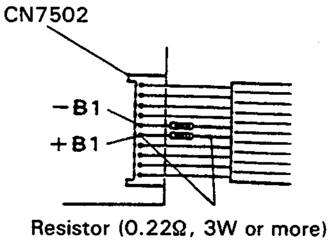


Fig. 2−2 FRONT 50W ASSY

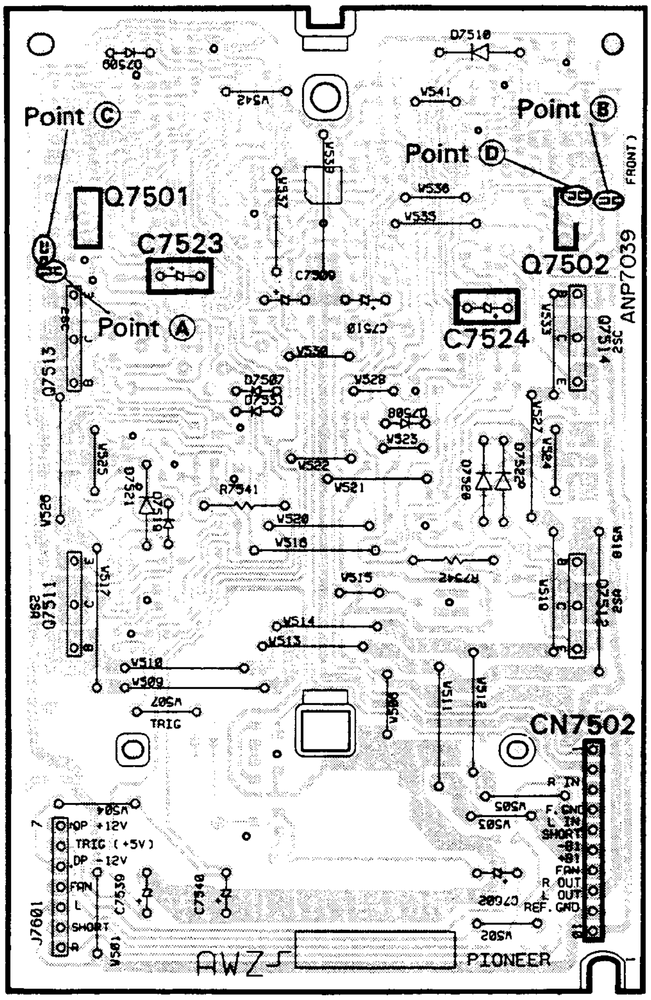

Point Ⓒ
Point Ⓑ
Point Ⓓ
Q7501
C7523
Q7502
Point Ⓐ
C7524
CN7502
ANP7039
FRONT
TRIG
+12V
TRIG (+5V)
-12V
FAN
L
SHORT
R
R IN
F.GND
L IN
SHORT
FAN
R OUT
L OUT
REF.GND
J7601
AWZ
PIONEER

Fig. 2−3 FRONT 50W ASSY

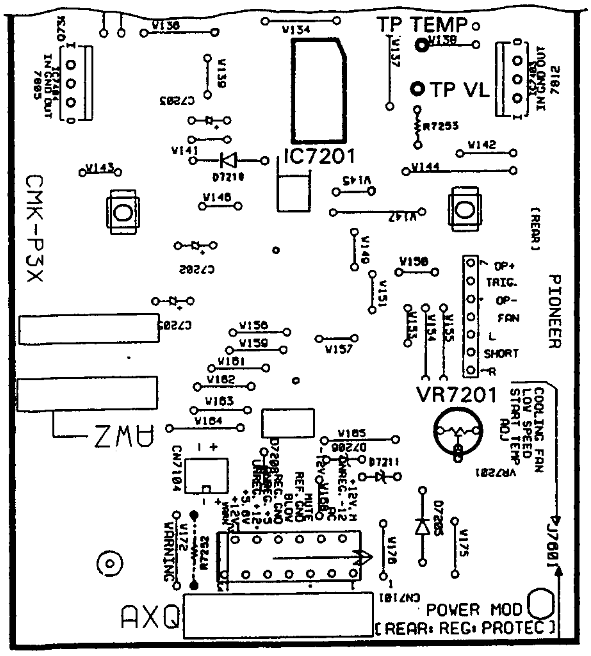

TP TEMP
TP VL
IC7201
CMK-P3X
VR7201
COOLING FAN LOW SPEED START TEMP ADJ
OP+
TRIG.
OP-
FAN
L
SHORT
R
PIONEER
(REAR)
ZMU
WARNING
J7601
AXQ
POWER MOD
[REAR: REG PROTEC]

Fig. 2−5 REGULATOR ASSY

3. Adjusting the Operating Temperature Setting of the Fan Motor (VR7201)

This adjustment is necessary when IC7401 (+12V regulator), Q7301 and Q7302 (temperature sensors), IC7201 (protection IC), or VR7201 has been replaced, or when the entire split board Assy of the Power Amp Module has been replaced.

■ Adjustment-Related Cautions

- Make sure the heat sink has sufficiently cooled (is the same as room temperature Ta.)
- Once the power has been turned ON, make measurements and adjustments as quickly as possible. (If too much time is taken, the heat sink temperature will rise, and the measurements will deviate from the Ta measurement point.)

■ Adjustment

1. Connect a voltmeter between TEMP and VL (or between IC7201 terminals No.7 and 9). (Refer to Fig. 2−4, Fig. 2−5)
2. Determine the fan motor operating temperature setting by means of the following formula. (Tolerance is within ±30mV.)
   Formula: (75°C − Ta) × 19 (mV)
   Ta: ambient temperature (°C)
3. Adjust VR7201 so that the voltage between TEMP and VL is the value obtained from the above formula.

For example:
when the room temperature is 25°C,
set value = (75 − 25) × 19 (mV)
= 950mV (tolerance within ±30mV).

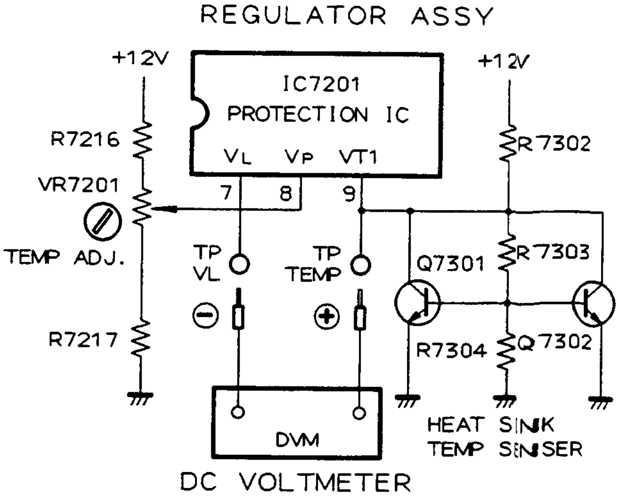

REGULATOR ASSY
+12V
+12V
IC7201
PROTECTION IC
VL
VP
VT1
7
8
9
R7216
VR7201
TEMP ADJ.
TP VL
TP TEMP
⊖
⊕
R7217
R7302
R7303
Q7301
R7304
Q7302
DVM
DC VOLTMETER
HEAT SINK TEMP SENSER

Fig. 2−4 Adjustment of Operating Temperature Setting of Fan Motor

9.3 CASSETTE DECK SECTION

- Adjustment points and test points are shown in Fig. 3−2 and Fig. 3−4.

■ Mechanical Adjustment

- Set the TAPE function.
- Test tape: STD−301 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	PLAY	STD−301 (Playback: 3kHz)	DECK Unit VR4111	TAPE TEST POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3010Hz±10Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3010Hz±60Hz).	

■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD−331E: For playback adjustment
   STD−631: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

**As the reference recording level is 250nwb/m for STD−331E, the recording level will be higher by 4 dB for STD−331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ᗡᗞ are trademarks of Dolby Laboratories Licensing Corporation.

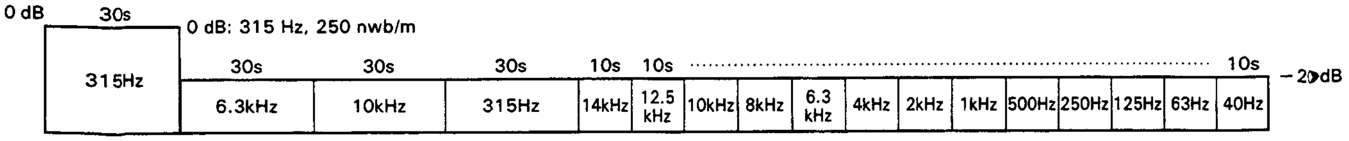


Fig. 3−1 STD−331E Test Tape

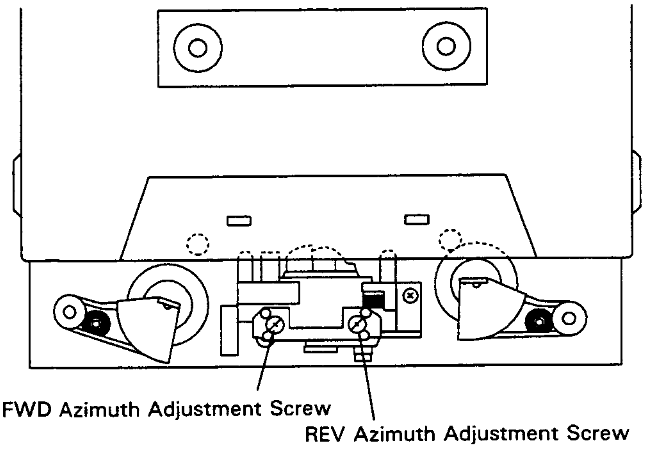
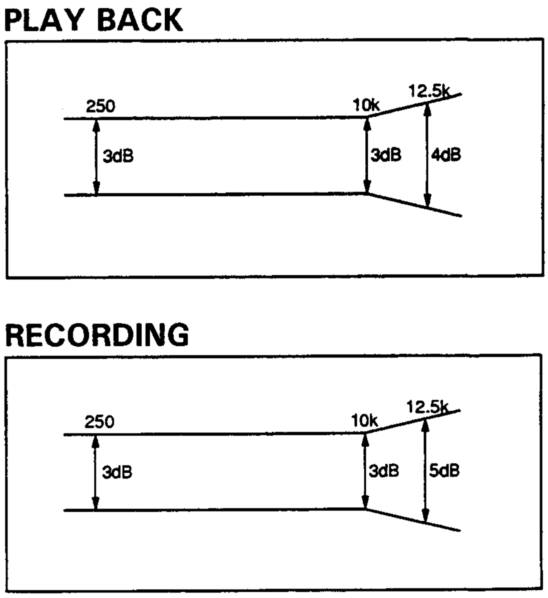


Fig. 3−2 Head Azimuth Adjustment


PLAY BACK

RECORDING

Fig. 3−3 Frequency Characteristics

● Playback Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

1. Head Azimuth Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD−331E test tape (Playback: 10kHz, −20dB)	Deck Ⅰ	Head azimuth adjustment screw (Fig. 3−2)	TAPE TEST POINT (L, Rch) (AF Assy)	Max. playback signal level	After adjustment, apply lock paint to the head azimuth adjustment screw.
				Deck Ⅱ				

2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD−331E test tape (Playback: 315Hz, 0dB)	Deck Ⅰ	VR4201 (Lch) VR4202 (Rch)	TAPE TEST POINT (L, Rch) (AF Assy)	−4.2 dBV	
				Deck Ⅱ	VR4203 (Lch) VR4204 (Rch)			

● Recording Adjustment

1. Bias Oscillation Frequency Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Load the STD−631 test tape and set the recording mode.	Deck I	—	—	Oscillation frequency to be 105.0kHz ±2kHz.	When the power is turned ON while the MONO button is depressed, the frequency will decrease 2−3 kHz.
				Deck II	T4351	Between Ⓐ point in Fig. 3−4 and GND.		

2. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Deck I	—	TAPE TEST POINT (L, Rch) (AF Assy)	−25.2 dBV	
				Deck II	Input signal level			
2	NORMAL	REC → PLAY	Load the STD−631 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	Deck I	—	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal.	
				Deck II	VR4351 (Lch) VR4352 (Rch)			

Note: Set the 10 kHz input signal level to the same value as the 315 Hz input signal level of step 1.

3. Recording Level Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Deck I	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	−8.2 dBV	
				Deck II				
2	NORMAL	REC → PLAY	STD−631 test tape and record/playback the 315Hz signal.	Deck I	—	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes −8.2dBV.	
				Deck II	VR4301 (Lch) VR4302 (Rch)			

4. ALC Operation Check

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC/PAUSE	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	−5.2 dBV	
2				Set to a level +10dB above the input level at step 1.		−2.2±2.5dBV	

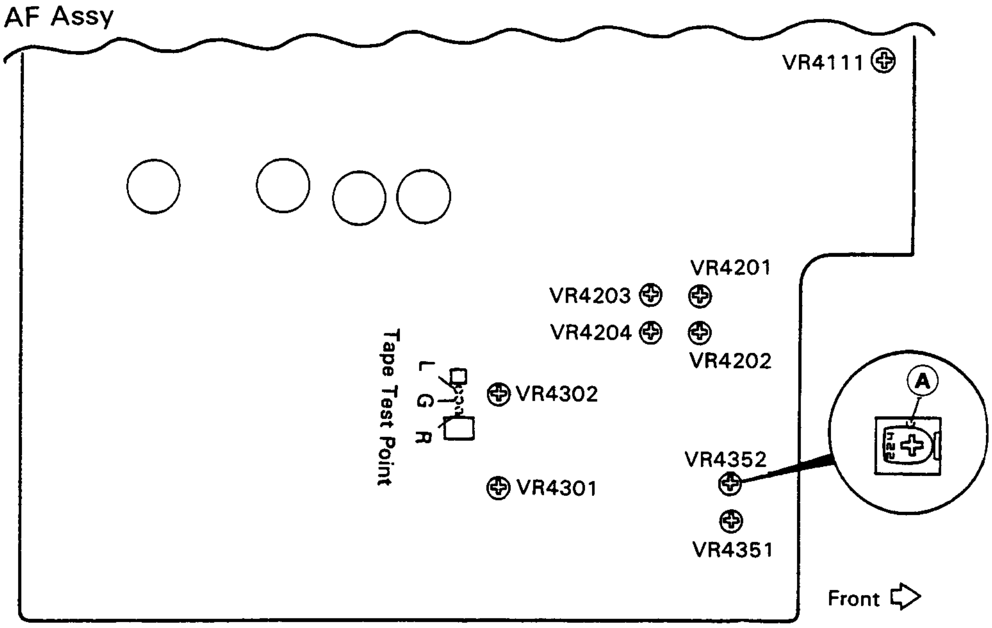

AF Assy
VR4111
VR4201
VR4203
VR4204
VR4202
Tape Test Point
L
G
R
VR4302
VR4301
VR4352
VR4351
A
Front

Fig. 3−4 Adjusting Points and Measurement Points

9.4 RDS ADJUSTMENT (FOR XR−P350/MEXK/EA, MEXK/EB, NBXK AND MEZIXK/DI ONLY)

- Setting the RDS-Signal generator (✻1).
- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 4−1

Note ✻1 : Audio Main 1kHz, 85 %
Pilot 10 % RDS 1.6 %
SK 4.7 %

Step No.	Adjustment Title	FM/AM SG		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	RDS (BPF) Level	88	60	88MHz	VR3501	Adjust so that the Waveform of RDS test point becomes at maximum. (Photo 1)
2	RDS IND. Lighting Level Verification	88	45	88MHz	——	Confirm that the RDS IND. to light up.

Note: Entry into RDS mode is done by switching to the FM band and entering an RDS signal from FM (RDS) SG to the FM 75Ω antenna terminal.

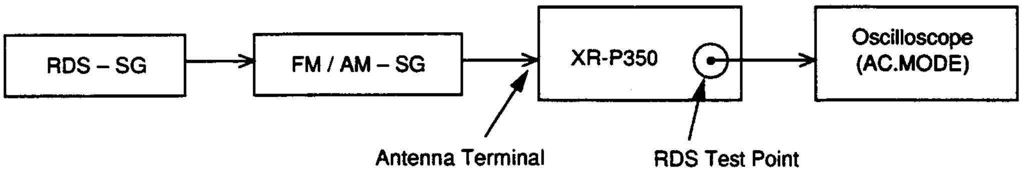

RDS − SG
FM / AM − SG
XR-P350
Oscilloscope (AC.MODE)
Antenna Terminal
RDS Test Point

Fig. 4−1 RDS Adjustment Wiring Diagram

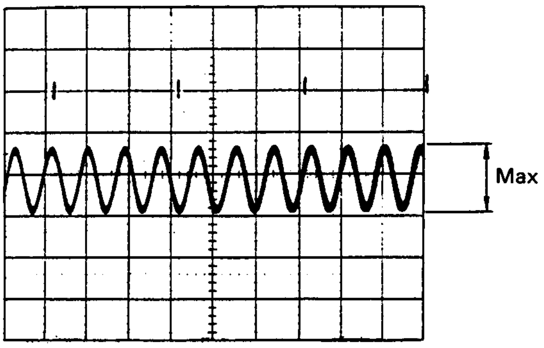
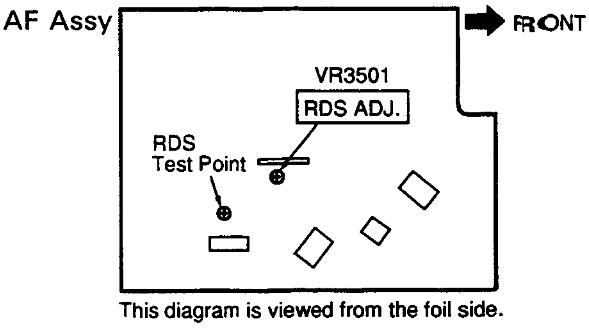


Photo 1


AF Assy
FRONT
VR3501
RDS ADJ.
RDS Test Point

This diagram is viewed from the foil side.

Fig. 4−2 Adjustment Points

9.5 CD SECTION

■ Adjustment Methods

If a disc player is adjusted incorrectly or inadequately, it may malfunction or not work at all even though there is nothing at all wrong with the pickup or the circuitry. Adjust correctly following the adjustment procedure.

● Adjustment Items/Verification Items and Order

If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in steps 1−4, the pickup block may be defective.

Step	Item	Test Point	Adjustment Location
1	Focus offset verification	TP1 (CN8201), Pin6 (FE)	None
2	Tracking error balance verification	TP1 (CN8201), Pin2 (TE)	None
3	Pickup radial/tangential direction tilt adjustment	TP1 (CN8201), Pin1 (RF)	Radial tilt adjustment screw, Tangential tilt adjustment screw
4	RF level verification	TP1 (CN8201), Pin1 (RF)	None
5	Focus servo loop gain adjustment	TP1 (CN8201), Pin5 (FI) TP1 (CN8201), Pin6 (FE)	VR8152 (FOCUS)
6	Tracking servo loop gain adjustment	TP1 (CN8201), Pin3 (TI) TP1 (CN8201), Pin2 (TE)	VR8151 (TRACKING)

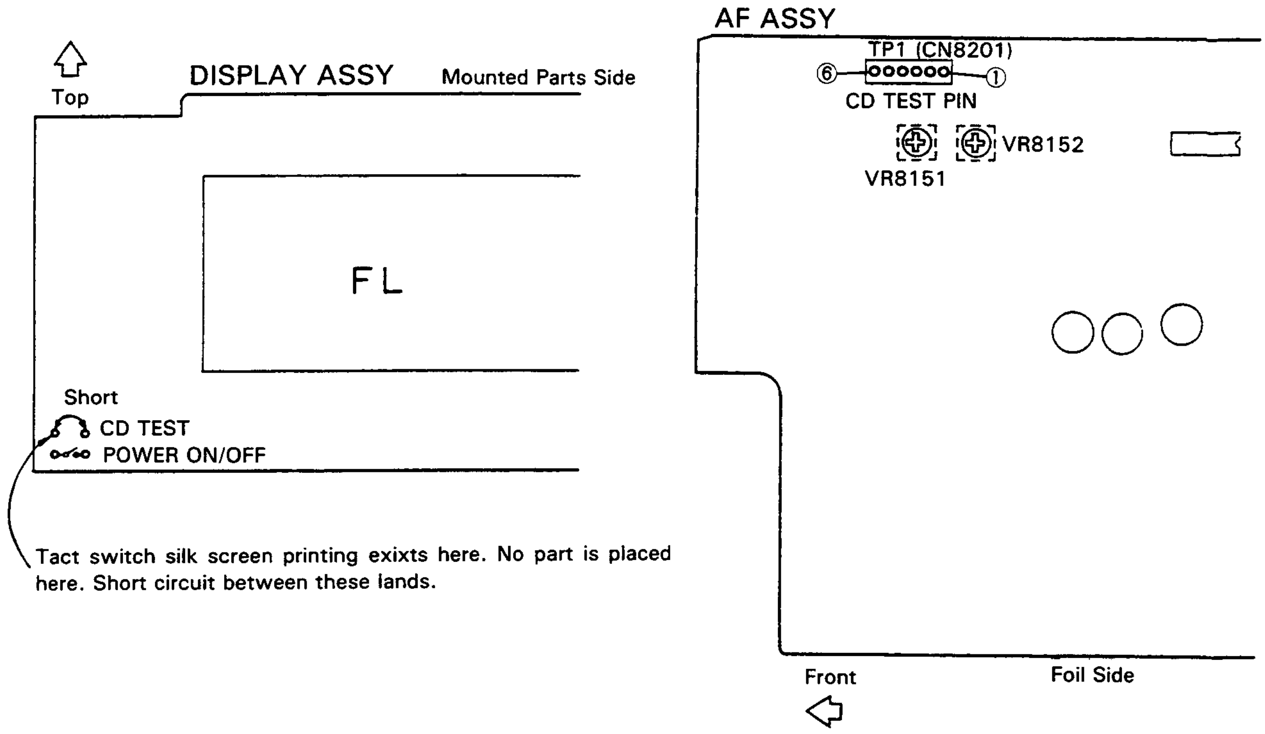
Abbreviation Table

FE : Focus Error
TE : Tracking Error
FI : Focus In
TI : Tracking In

● Measuring Instruments and Tools

1. Dual trace oscilloscope (10 : 1 probe)
2. Low-frequency oscillator
3. Test disc (YEDS−7)
4. Low pass filter (39kΩ + 0.001μF)
5. Resistor (100kΩ)
6. 8 cm disc (With at least about 20 minutes of recording)
7. Ball point hexagon wrench (GGK1002)
8. Standard tools

● Test Point and Adjustment Variable Resistor Positions


AF ASSY
Top
DISPLAY ASSY
Mounted Parts Side
TP1 (CN8201)
⑥
①
CD TEST PIN
VR8152
VR8151
FL
Short
CD TEST
POWER ON/OFF
Front
Foil Side

Tact switch silk screen printing exixts here. No part is placed here. Short circuit between these lands.

Fig. 5－1 Adjustment Location

● Notes

1. Use a 10 : 1 probe for the oscilloscope.
2. All the knob positions (settings) for the oscilloscope in the adjustment procedures are for when a 10 : 1 probe is used.

● Test Mode

These models have a test mode so that the adjustment and checks required for service can be carried out easily. When these models are in test mode, the keys on the front panel work differently from normal. Adjustments and checks can be carried out by operating these keys with the correct procedure. For these models, all adjustments are carried out in test mode.

[Setting these models to test mode]

How to set this model into test mode.
1. When the Power switch to activated, set the FUNCTION button to CD.
2. Short-circuit between both CD TEST points. (See Fig. 5－1)

When the test mode is set correctly, the display is different from what it usually is when the power is turned on.
If the display is still the same as usual, test mode has not been set correctly, so repeat Steps 1－2.

[Release from test mode]

Here is the procedure for releasing the test mode:
1. Press the STOP key and stop all operations.
2. Turn off the power switch on the front panel.

[Operations of the keys in test mode]

Code	Key Name	Function in Test Mode	Explanation
	PROGRAM	Focus servo close	The laser diode is lit up and the focus actuator is lifted up, then lowered slowly and the focus servo is closed at the point where the objective lens is focused on the disc. With the player in this state, if you lightly rotate the stopped disc by hand, you can hear the sound the focus servo. If you can hear this sound, the focus servo is operating correctly. If you press this key with no disc mounted, the laser diode lights up, the focus actuator is pulled up, then the actuator is lowered and raised three times and returned to its original position.
▷/▯▯	(PLAY/PAUSE)	Spindle servo ON	Starts the spindle motor in the clockwise direction and when the disc rotation reaches the prescribed speed (about 500rpm at the inner periphery), sets the spindle servo in a closed loop. Be careful. Pressing this key when there is no disc mounted makes the spindle motor run at the maximum speed. If the focus servo does not go correctly into a closed loop or the laser light shines on the mirror section at the outermost periphery of the disc, the same symptom is occurred.
		Tracking servo close/open	Pressing this key when the focus servo and spindle servo are operating correctly in closed loops puts the tracking servo into a closed loop, displays the track number being played back and the elapsed time on the front panel, and outputs the playback signal. If the elapsed time is not displayed or not counted correctly or the audio is not played back correctly, it may be that the laser is shining on the section with no sound recorded at the outer edge of the disc, that something is out of adjustment, or that there is some other problem. This key is a toggle key and open/close the tracking servo alternately. This key has no effect if no disc is mounted.

Code	Key Name	Function in Test Mode	Explanation
▯◁◁	(MANUAL/TRACK SEARCH REV)	Carriage reverse (inwards)	Moves the pickup position toward the inner diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation.
▷▷▯	(MANUAL/TRACK SEARCH FWD)	Carriage forward (outwards)	Moves the pickup position toward the outer diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation.
□	(STOP)	Stop	Initializes and the disc rotation stops. The pickup and disc remain where they are when this key is pressed.
⏏	(EJECT)	Disc Eject	Eject the disc. This key operation does not affect the position of the pickup.

[How to playback a disc in test mode]

In test mode, since the servos operate independently, playing back a disc requires that you operate the keys in the correct order to close the servos.
Here is the key operation sequence for playing back a disc in test mode.

PROGRAM	Lights up the laser diode and closes the focus servo.
⇩	
▷/⏸	Starts the spindle motor and closes the spindle servo.
⇩	
▷/⏸	Closes the tracking servo.

Wait at least 2−3 seconds between each of these operations.

1. Focus Offset Verification

● Objective	Verify the DC offset for the focus error amp.		
● Symptom when out of adjustment	The model does not focus in and the RF signal is dirty.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1 (CN8201), Pin6 (FE) [Settings] 5mV division 10ms division DC mode	● Player State	Test mode, stopped (just the Power switch on)
		● Adjustment Location	None
		● Disc	None needed

[Procedure]

Verify the DC voltage at TP1 (CN8201), Pin6 (FE) is 0±50mV.

Note: If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in adjustment items 1−4, the pickup block may be defective.

2. Tracking Error Balance Verification

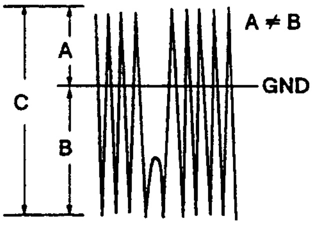
● Objective	To verify that there is no variation in the sensitivity of the tracking photo diode.		
● Symptom when out of adjustment	Play does not start or track search is impossible.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1 (CN8201), Pin2 (TE). This connection may be via a low pass filter. [Settings] 50mV/division 5ms/division DC mode	● Player State	Test mode, focus and spindle servos closed and tracking servo open.
		● Adjustment Location	None
		● Disc	YEDS−7

[Procedure]

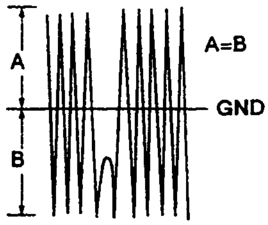
1. Move the pickup to midway across the disc (R=35mm) with the ▷▷⁞ (MANUAL/TRACK SEARCH FWD) key or ⁞◁◁ (REV) key.
2. Press the PROGRAM key, then the ▷/⁞⁞ (PLAY/PAUSE) key in that order to close the focus servo then the spindle servo.
3. Line up the bright line (ground) at the center of the oscilloscope screen and put the oscilloscope into DC mode.
4. Supposing that the positive amplitude of the tracking error signal at TP1 (CN8201), pin2 (TE) is (A) and the negative amplitude is (B), the following expression is satisfied.

$$\text{When } A \geqq B,\ \frac{A-B}{C} \times \frac{1}{2} \leqq 0.1$$

$$\text{When } A < B,\ \frac{B-A}{C} \times \frac{1}{2} \leqq 0.1$$



When there is a DC component



When there is no DC component

3. Pickup Radial/Tangential Tilt Adjustment

● Objective ● Symptom when out of adjustment	To adjust the angle of the pickup relative to the disc so that the laser beams are shone straight down into the disc for the best read out of the RF signals. Sound broken; some discs can be played but not others.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1 (CN8201), Pinl (RF). [Settings] 20mV/division 200ns/division AC mode	● Player State ● Adjustment Location ● Disc	Test mode, play Pickup radial tilt adjustment screw and tangential tilt adjustment screw 8 cm disc [Hewever, those with approx. 20 min of audio signal (music).]

[Procedure]

1. Press the ▷▷| (MANUAL/TRACK SEARCH FWD) key or |◁◁ (REV) key to move the pickup to the external circumference of the disc.
   Press the PROGRAM key, the ▷/|| (PLAY/PAUSE) key twice in that order to close the respective servos and put the player into play mode.
2. First, adjust the radial tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly.
3. Next, adjust the tangential tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly (Fig. 5−3).
   ※ The ball-point type hexagonal wrench is used because the disc will get in the way if a normal hexagonal wrench is used.
4. Adjust the radial tilt adjustment screw and the tangential tilt adjustment screw again so that the eye pattern can be seen the most clearly. As necessary, adjust the two screws alternately so that the eye pattern can be seen the most clearly.
5. When the adjustment is completed, lock the radial and tangential adjustment screw.

Note: Radial and tangential mean the directions relative to the disc shown in Fig. 5−2.

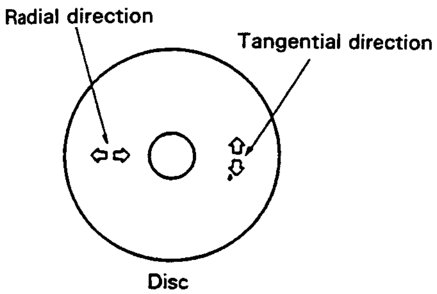
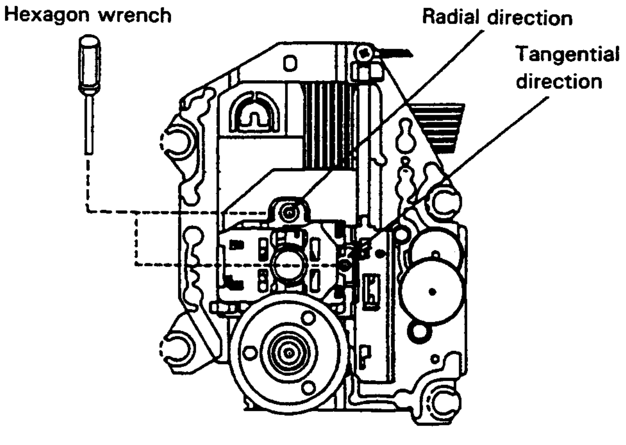


Fig. 5−2



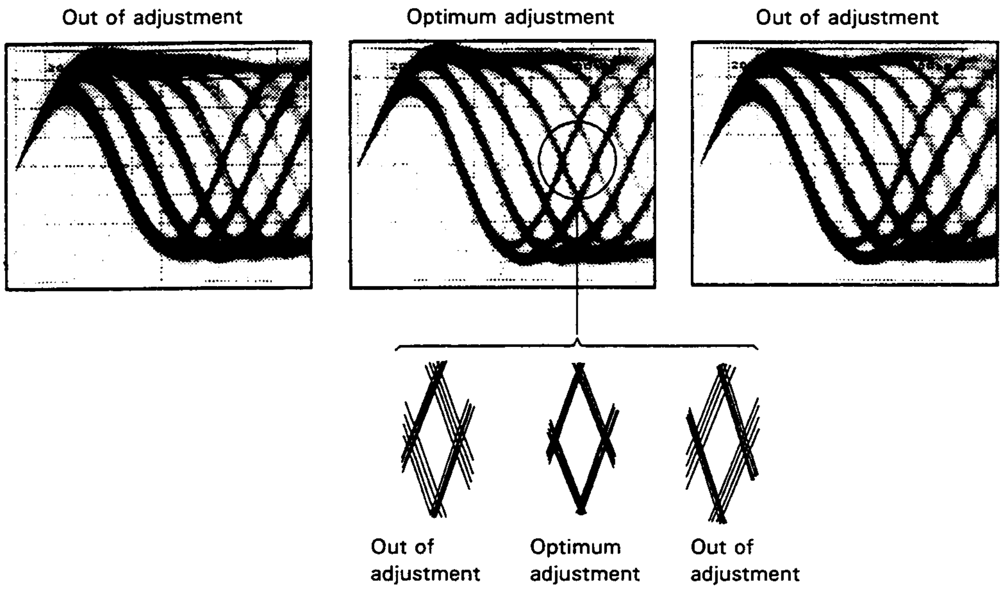

Out of adjustment
Optimum adjustment
Out of adjustment
Out of adjustment
Optimum adjustment
Out of adjustment

Fig. 5−3 Eye Pattern

4. RF Level Verification

● Objective	To verify the playback RF signal amplitude.		
● Symptom when out of adjustment	No play or no search		
● Measurement Instrument Connections	Connect the oscilloscope to TP1 (CN8201), Pin1 (RF). [Settings] 50mV/division 10ms/division AC mode	● Player State ● Adjustment Location ● Disc	Test mode, play None YEDS−7

[Procedure]

1. Move the pickup to midway across the disc (R=35mm) with the ▷▷▯ (MANUAL/TRACK SEARCH FWD) key or ▯◁◁ (REV) key, then press the PROGRAM key, the ▷/▯▯ (PLAY/PAUSE) key twice in that order to close the respective servos and put the player into play mode.
2. Verify the RF signal amplitude is 1.2Vp−p±0.2V.

5. Focus Servo Loop Gain Adjustment

● Objective ● Symptom when out of adjustment	To optimize the focus servo loop gain. Playback does not start or focus actuator noisy.		
● Measurement Instrument Connections	See Fig. 5−4. [Settings] CH1 20mV／division X−Y mode CH2 5mV／division	● Player State ● Adjustment Location ● Disc	Test mode, play VR8152 (FOCUS) YEDS−7

[Procedure]

1. Set the AF generator output to 1.2kHz and 1Vp−p.
2. Press the ▷▷| (MANUAL／TRACK SEARCH FWD) key or |◁◁ (REV) key to move the pickup to halfway across the disc (R=35mm), then press the PROGRAM key, the ▷／‖ (PLAY／PAUSE) key twice in that order to close the corresponding servos and put the player into play mode.
3. Adjust VR8152 (FOCUS) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

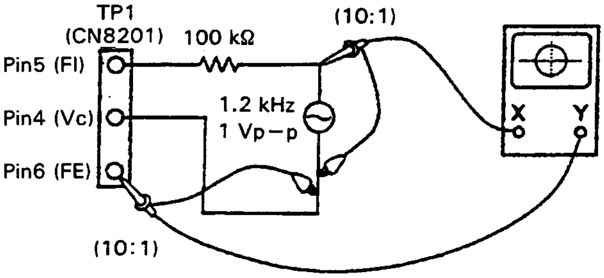
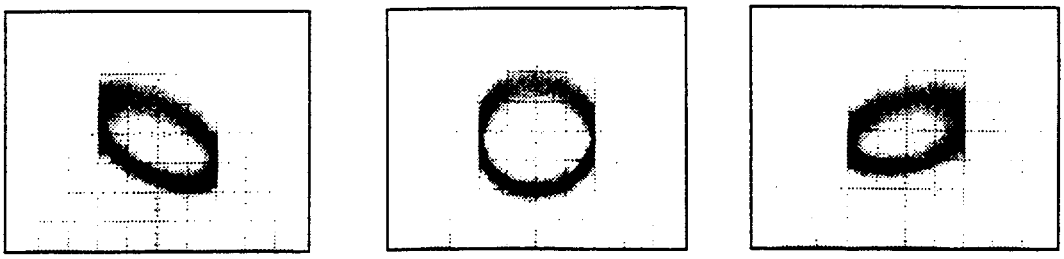


Fig. 5−4

Focus Gain Adjustment



Higher gain　　Optimum gain　　Lower gain

6. Tracking Servo Loop Gain Adjustment

● Objective	To optimize the tracking servo loop gain.		
● Symptom when out of adjustment	Playback does not start, during searches the actuator is noisy, or tracks are skipped.		
● Measurement Instrument Connections	See Fig. 5−5. [Settings] CH1 50mV／division X−Y mode CH2 20mV／division	● Player State ● Adjustment Location ● Disc	Test mode, play VR8151 (TRACKING) YEDS−7

[Procedure]

1. Set the AF generator output to 1.2kHz and 2Vp−p.
2. Press the ▷▷▯ (MANUAL／TRACK SEARCH FWD) key or ▯◁◁ (REV) key to move the pickup to halfway across the disc (R=35mm), then press the PROGRAM key, the ▷／▯▯ (PLAY／PAUSE) key twice in that order to close the corresponding servos and put the player into play mode.
3. Adjust VR8151 (TRACKING) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

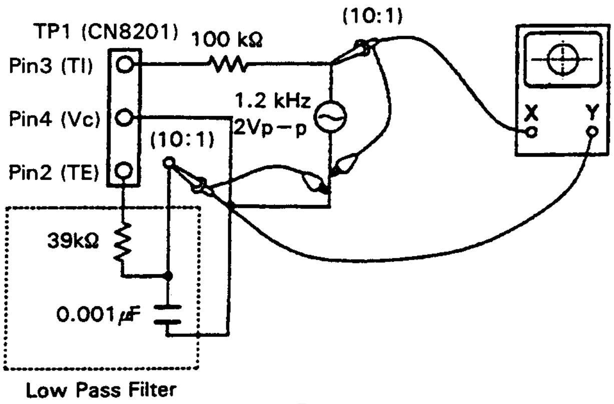
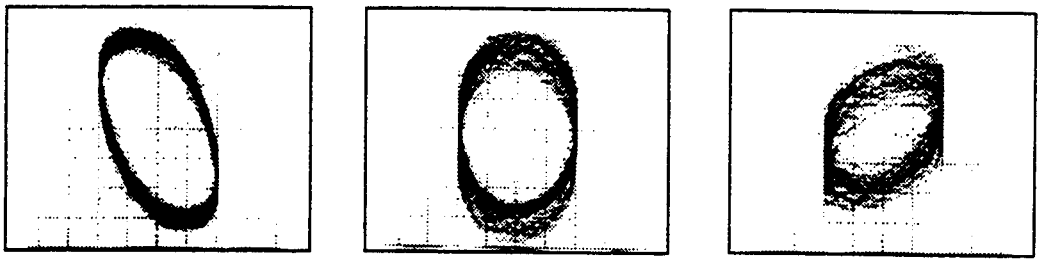


Fig. 5−5

Tracking Gain Adjustment



Higher gain

Optimum gain

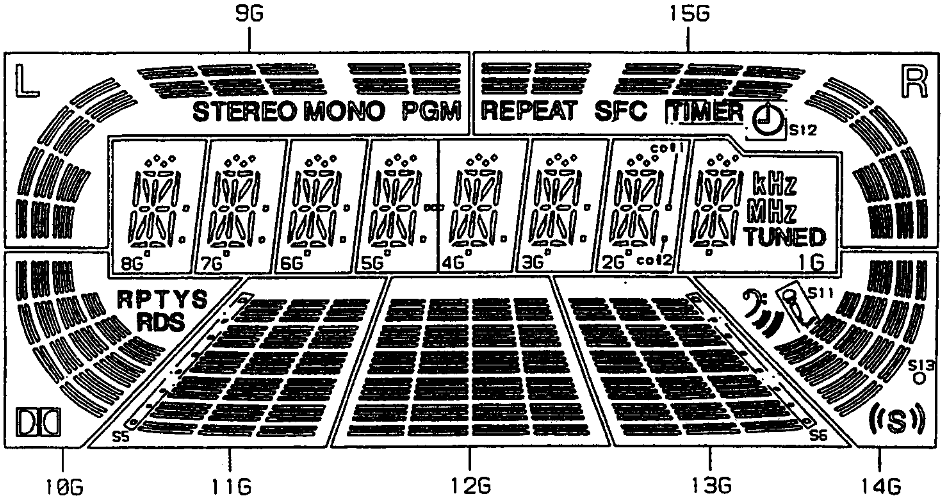
Lower gain

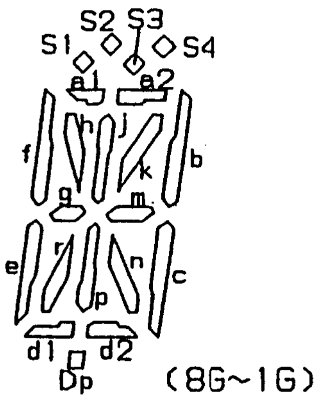
10. FL INFORMATION

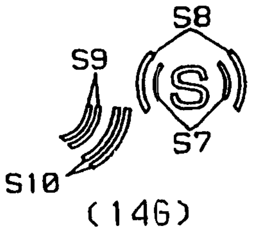
■ AAV7009 (V1701 : DISPLAY ASSY)

● FL Tube

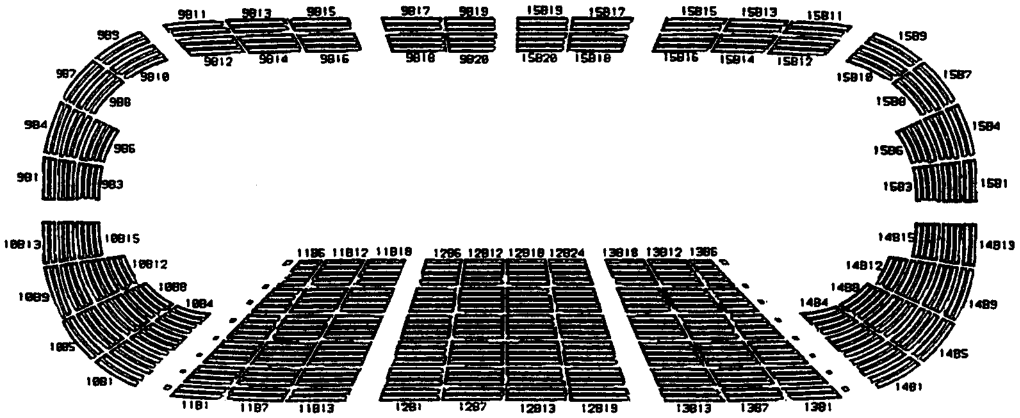
● Grid Assignment


9G
15G
L
R
STEREO MONO PGM
REPEAT SFC TIMER
S12
8G
7G
6G
5G
4G
3G
2G
col1
col2
kHz
MHz
TUNED
1G
RPTYS
RDS
S11
S13
S5
S6
(S)
10G
11G
12G
13G
14G

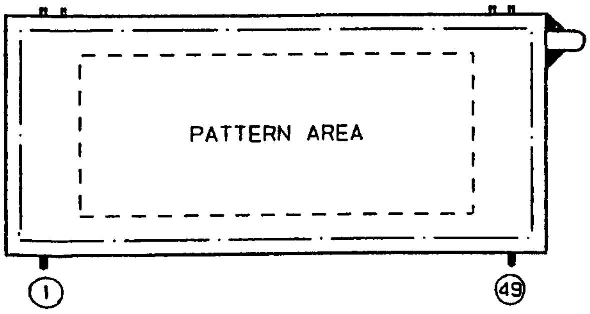

S2
S3
S1
S4
a1
a2
h
j
f
b
k
g
m
e
r
n
c
p
d1
d2
Dp
(8G~1G)


S8
S9
S7
S10
(14G)

● Segment Assignment


9B11
9B13
9B15
9B17
9B19
15B19
15B17
15B15
15B13
15B11
9B9
9B12
9B14
9B16
9B18
9B20
15B20
15B18
15B16
15B14
15B12
15B9
9B7
9B10
15B10
15B7
9B8
15B8
9B4
15B4
9B6
15B6
9B1
9B3
15B3
15B1
10B13
10B15
14B15
14B13
10B12
14B12
10B8
14B8
10B9
10B4
14B4
14B9
10B5
14B5
10B1
14B1
11B6
11B12
11B18
12B6
12B12
12B18
12B24
13B18
13B12
13B6
11B1
11B7
11B13
12B1
12B7
12B13
12B19
13B13
13B7
13B1

● Pin Assignment


PATTERN AREA
①
㊾

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CONNECTION	F1	F1	F1	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20

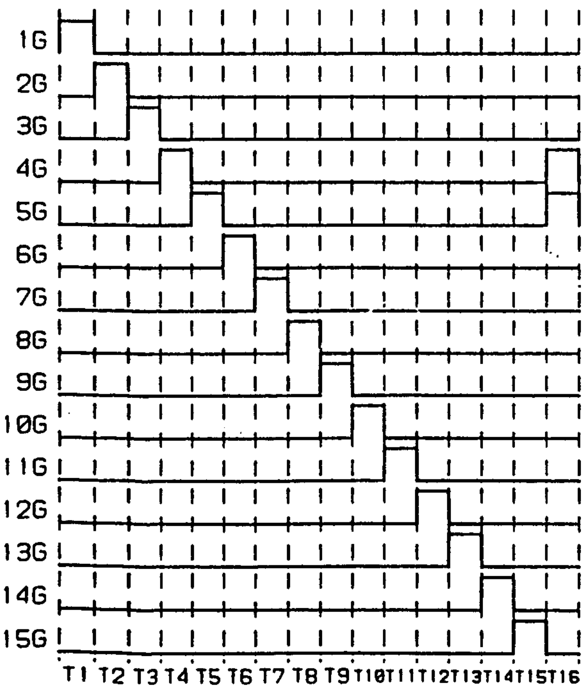
PIN NO.	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
CONNECTION	P21	P22	P23	P24	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F2	F2	F2

NOTE
1) F1,F2 --- Filament
2) NP ------ No pin
3) DL ------ Datum Line
4) 1G~15G --- Grid
5) The angle of the field of vision shall be 28.6° on the upper side and 26.6° on the lower side.

- Anode Connection

	15G	14G	13G	12G	11G	10G	9G	8G~6G	5G	4G	3G,2G	1G
P1	15B11	14B8	–	12B22	–	S	9B11	m	m	m	m	m
P2	15B14	14B7	13B15	12B15	11B15	–	9B14	coℓ1	ooo		coℓ1	kHz
P3	15B13	14B6	13B9	12B9	11B9	10B8	9B13	f	f	f	f	f
P4	15B16	14B5	13B3	12B3	11B3	10B7	9B16	b	b	b	b	b
P5	15B15	–	S6	12B21	S5	RDS	9B15	h	h	h	h	h
P6	15B18	14B4	13B14	12B14	11B14	10B6	9B18	k	k	k	k	k
P7	15B17	14B3	13B8	12B8	11B8	10B5	9B17	j	j	j	j	j
P8	15B20	14B2	13B2	12B2	11B2	10B4	9B20	a2	a2	a2	a2	a2
P9	15B19	14B1	–	12B20	–	10B3	9B19	a1	a1	a1	a1	a1
P10	S12	S8	13B13	12B13	11B13	10B2	**STEREO**	S3	S3	S3	S3	S3
P11	**SFC**	S7	13B7	12B7	11B7	10B1	**MONO**	S1	S1	S1	S1	S1
P12	**REPEAT**	S13	13B1	12B1	11B1	–	**PGM**	S4	S4	S4	S4	S4
P13	R	**S**	–	12B19	–	DD	L	S2	S2	S2	S2	S2
P14	15B12	S10	13B4	12B4	11B4	Y	9B12	g	g	g	g	g
P15	15B9	S9	13B10	12B10	11B10	T	9B9	c	c	c	c	c
P16	15B10	𝄢	13B16	12B16	11B16	P	9B10	e	e	e	e	e
P17	15B7	S11	–	12B23	–	R	9B7	n	n	n	n	n
P18	15B8	14B9	13B5	12B5	11B5	10B9	9B8	r	r	r	r	r
P19	15B4	14B10	13B11	12B11	11B11	10B10	9B4	p	p	p	p	p
P20	15B5	14B11	13B17	12B17	11B17	10B11	9B5	coℓ2	coℓ2	coℓ2	coℓ2	MHz
P21	15B6	14B12	–	12B24	–	10B12	9B6	d1	d1	d1	d1	d1
P22	15B1	14B13	13B6	12B6	11B6	10B13	9B1	d2	d2	d2	d2	d2
P23	15B2	14B14	13B12	12B12	11B12	10B14	9B2	Dp	Dp	Dp	Dp	Dp
P24	15B3	14B15	13B18	12B18	11B18	10B15	9B3	–	–	–	–	**TUNED**

- Grid Timing Chart



- Anode Timing Chart

	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	T15	T14	–	T12	–	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P2	T15	T14	T13	T12	T11	–	T9	T8	T7	T6	T16		T3	T2	T1
P3	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P4	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P5	T15	–	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P6	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P7	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P8	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P9	T15	T14	–	T12	–	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P10	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P11	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P12	T15	T14	T13	T12	T11	–	T9	T8	T7	T6	T5	T4	T3	T2	T1
P13	T15	T14	–	T12	–	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P14	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P15	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P17	T15	T14	–	T12	–	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P18	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P19	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P20	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P21	T15	T14	–	T12	–	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P22	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P23	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
P24	T15	T14	T13	T12	T11	T10	T9	–	–	–	–	–	–	–	T1

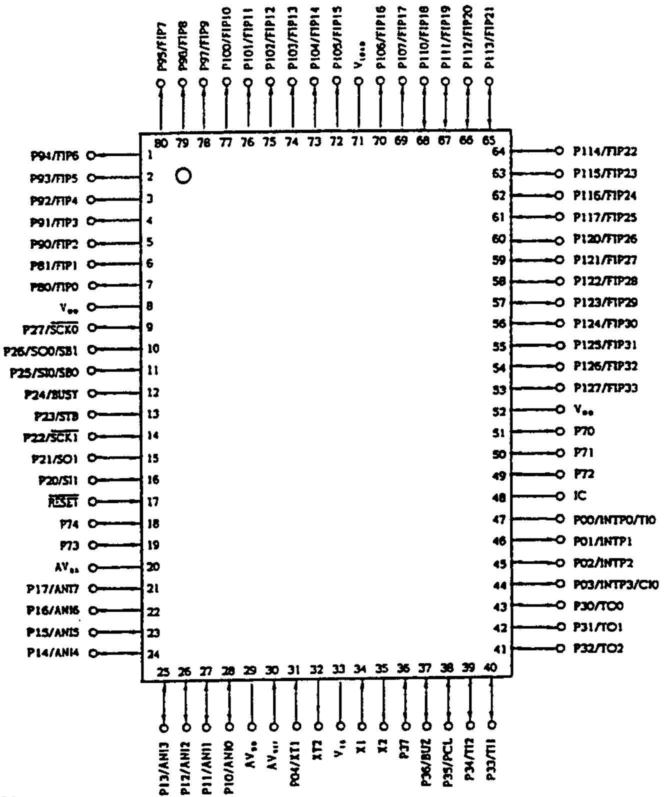
11. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ PD4562A (IC1101 : AF ASSY)

● System Control Micro-computer

- Pin Assignment (Top view)


P95/FIP7
P96/FIP8
P97/FIP9
P100/FIP10
P101/FIP11
P102/FIP12
P103/FIP13
P104/FIP14
P105/FIP15
VLOAD
P106/FIP16
P107/FIP17
P110/FIP18
P111/FIP19
P112/FIP20
P113/FIP21
80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65
P94/FIP6 1
P93/FIP5 2
P92/FIP4 3
P91/FIP3 4
P90/FIP2 5
P81/FIP1 6
P80/FIP0 7
VDD 8
P27/SCK0 9
P26/SO0/SB1 10
P25/SI0/SB0 11
P24/BUSY 12
P23/STB 13
P22/SCK1 14
P21/SO1 15
P20/SI1 16
RESET 17
P74 18
P73 19
AVSS 20
P17/ANI7 21
P16/ANI6 22
P15/ANI5 23
P14/ANI4 24
64 P114/FIP22
63 P115/FIP23
62 P116/FIP24
61 P117/FIP25
60 P120/FIP26
59 P121/FIP27
58 P122/FIP28
57 P123/FIP29
56 P124/FIP30
55 P125/FIP31
54 P126/FIP32
53 P127/FIP33
52 VSS
51 P70
50 P71
49 P72
48 IC
47 P00/INTP0/TI0
46 P01/INTP1
45 P02/INTP2
44 P03/INTP3/CI0
43 P30/TO0
42 P31/TO1
41 P32/TO2
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
P13/ANI3
P12/ANI2
P11/ANI1
P10/ANI0
AVDD
AVREF
P04/XT1
XT2
VSS
X1
X2
P37
P36/BUZ
P35/PCL
P34/TI2
P33/TI1

Notes:
1. IC (Internally Connected): Connected to Vss.
2. AVDD: Connected to VDD.
3. AVss: Connected to Vss.

- Pin Function

No.	Pin Name	Pin Function	I/O	Description
1	P94	A	O	Switching analog switch output
2	P93	INH	O	Analog switch inhibit output
3	P92	PHONO	O	Switching PHONO output (Not used)
4	P91	0006 STB	O	PM0006 strobe output
5	P90	–	–	——
6	P81	CD $\overline{\text{RESET}}$	O	CD, reset output
7	P80	XTAL ON/$\overline{\text{OFF}}$	O	CD, XTAL ON/OFF
8	VDD	VDD	–	+5V
9	P27	BUS CLK	I	DISPLAY μ-COM. communication CLK
10	P26	BUS DATA OUT	O	DISPLAY μ-COM. DATA OUT
11	P25	BUS DATA IN	I	DISPLAY μ-COM. DATA IN
12	P24	–	–	——
13	P23	CD XLT	O	CD control (Latch)
14	P22	CD CLK	O	CD control (Clock)
15	P21	CD DATA	O	CD control (Data)
16	P20	CD SQSO	I	Sub code Q data serial input
17	$\overline{\text{RESET}}$	$\overline{\text{RESET}}$	–	Reset
18	P74	FCOK	I	Focus OK input
19	P73	LPS3	I	CD mechanism control input
20	AVss	–	–	GND
21	P17	LPS2	I	CD mechanism control input
22	P16	LPS1	I	
23	P15	LDON	O	Laser diode ON/OFF
24	P14	INSD	I	CD mechanism inside detection input
25	P13	LIN	O	CD loading in
26	P12	LOUT	O	CD loading out
27	P11	GFS	I	GFS detection input
28	P10	STAND BY	I	Standby input
29	AVDD	VDD	–	+5V*
30	AVREF	VDD	–	
31	P04	SENS	I	CD LSI operation status multi-mode input
32	XT2	–	–	——

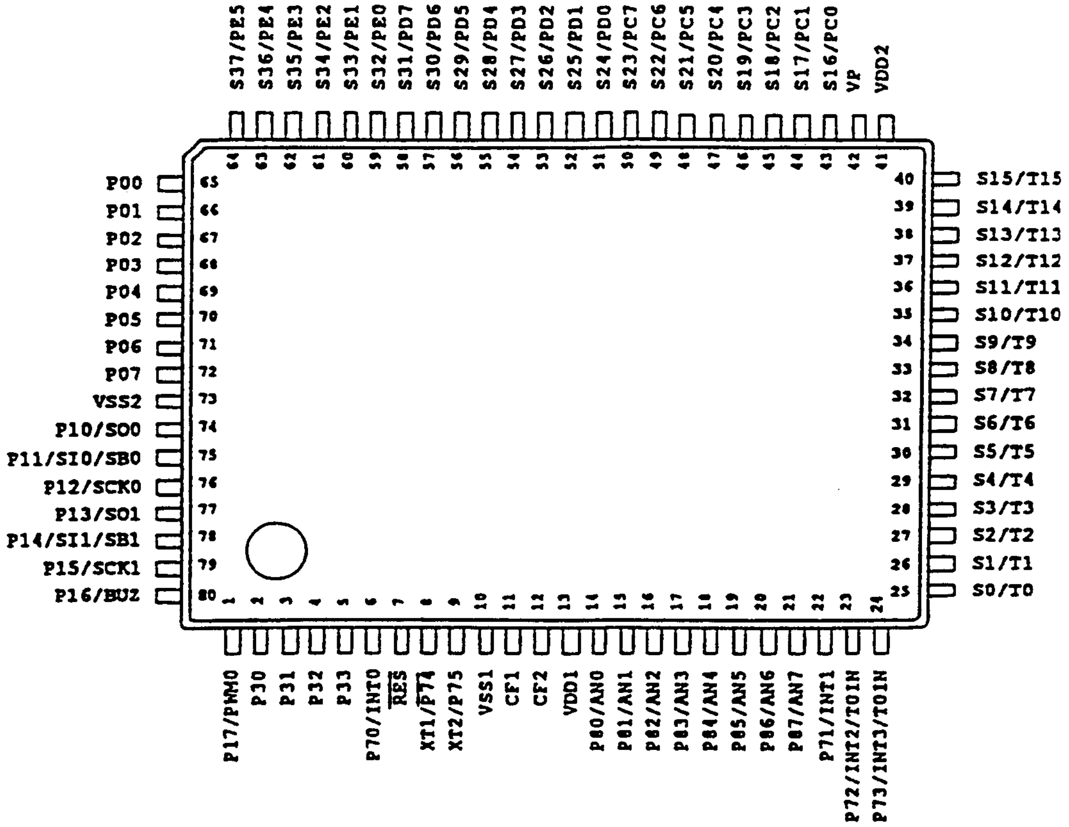
No.	Pin Name	Pin Function	I/O	Description
33	Vss	–	–	GND
34	X1	XTAL	–	Connected to oscillator
35	X2	XTAL	–	
36	P37	MOTOR	O	Deck motor control
37	P36	1CRO2	I	CrO2 tape detection switch input (Mecha Ⅰ)
38	P35	1MODE	I	Head base position detection switch input (Mecha Ⅰ)
39	P34	1PULSE	I	Reel pulse input (Mecha Ⅰ)
40	P33	1HALF	I	Cassette half detection switch (Mecha Ⅰ)
41	P32	1SOL	O	Solenoid control output (Mecha Ⅰ)
42	P31	2HALF	I	Cassette half detection switch input (Mecha Ⅱ)
43	P30	2SOL	O	Solenoid control output (Mecha Ⅱ)
44	P03	2PULSE	I	Reel pulse input (Mecha Ⅱ)
45	P02	SCOR	I	Subcode synch S0+S1 input
46	P01	2MODE	I	Head base position detection switch input (Mecha Ⅱ)
47	P00	RDS CLK	I	RDS clock input *[1]
48	IC	–	–	GND
49	P72	2CRO2	I	CrO2 tape detection switch input (Mecha Ⅱ)
50	P71	ARF	I	FWD REC prevention tab detection switch
51	P70	ARR	I	REV REC prevention tab detection switch
52	VDD	VDD	–	+5V
53	P127	VOL DOWN	O	VOLUME DOWN
54	P126	VOL UP	O	VOLUME UP
55	P125	–	–	——
56	P124	BEAT CUT	O	Switching beat cut output
57	P123	BIAS	O	REC BIAS circuit control output
58	P122	REC CRO2	O	Equalizer circuit control output for CrO2 tape when recording.
59	P121	REC MUTE	O	REC MUTE circuit control output
60	P120	DOLBY PB/$\overline{\text{REC}}$	O	CXA1101 Playback/Recording control output
61	P117	PB CRO2	O	Equalizer circuit control output for CrO2 tape when playback.
62	P116	DOL ON/OFF	O	CXA1101 Dolby NR ON/OFF control output
63	P115	PB 1/2	O	Mecha Ⅰ, Ⅱ control output
64	P114	STEREO	I	STEREO status discrimination input
65	P113	TUNE	I	TUNE status discrimination input
66	P112	RDS ID	I	RDS tuning status discrimination input *[1]
67	P111	RDS DATA	I	RDS data input *[1]
68	P110	RDS MUTE	O	RDS circuit power supply control output *[1]
69	P107	MONO	O	Execution MONO control output
70	P106	TX MUTE	O	Tuner mute output
71	VLOAD	–	–	GND
72	P105	–	–	——
73	P104	MOD MUTE	O	Power module mute output
74	P103	POWER ON/OFF	O	Power ON/OFF
75	P102	FAN ON/OFF	O	Fan motor ON/OFF
76	P101	FUNC MUTE	O	Function mute output
77	P100	0006 CLK	O	PM0006 control clock output
78	P97	0006 DA	O	PM0006 control data output
79	P96	PLL CE	O	PLL IC control chip enable output
80	P95	B	O	Switching analog switch output

*[1]: *XR−P350/MEXK/EA, MEXK/EB, NBXK and MEZIXK/DI only.*

PDC022A (IC1901 : DISPLAY ASSY)

● System Control Micro-computer

- Pin Assignment (Top view)


S37/PE5
S36/PE4
S35/PE3
S34/PE2
S33/PE1
S32/PE0
S31/PD7
S30/PD6
S29/PD5
S28/PD4
S27/PD3
S26/PD2
S25/PD1
S24/PD0
S23/PC7
S22/PC6
S21/PC5
S20/PC4
S19/PC3
S18/PC2
S17/PC1
S16/PC0
VP
VDD2
P00
P01
P02
P03
P04
P05
P06
P07
VSS2
P10/SO0
P11/SI0/SB0
P12/SCK0
P13/SO1
P14/SI1/SB1
P15/SCK1
P16/BUZ
S15/T15
S14/T14
S13/T13
S12/T12
S11/T11
S10/T10
S9/T9
S8/T8
S7/T7
S6/T6
S5/T5
S4/T4
S3/T3
S2/T2
S1/T1
S0/T0
P17/PWM0
P30
P31
P32
P33
P70/INT0
$\overline{\text{RES}}$
XT1/P74
XT2/P75
VSS1
CF1
CF2
VDD1
P80/AN0
P81/AN1
P82/AN2
P83/AN3
P84/AN4
P85/AN5
P86/AN6
P87/AN7
P71/INT1
P72/INT2/T0IN
P73/INT3/T0IN

- Pin Function

No.	Pin Name	Pin Function	I/O	Description
1	P17	LED10	O	LED ON output
2	P30	KEY0	I	Key input
3	P31	–	–	——
4	P32	AF RESET	O	AF RESET output
5	P33	10G	O	FL GRID
6	P70	POW ON/OFF	–	POWER ON/OFF
7	$\overline{\text{RES}}$	$\overline{\text{RESET}}$	–	Reset
8	XT1	KEY1	I	Key input
9	XT2	KEY2	I	
10	VSS1	VSS1	–	GND
11	CF1	XTAL1	–	X'TAL input
12	CF2	XTAL2	–	
13	VDD1	VDD1	–	+5V
14	P80	KEY3	I	Key input
15	P81	KEY4	I	
16 | 21	P82 | P87	SPA1 | SPA6	I	Spectrum analyzer input
22	P71	AC	I	AC input
23	P72	–	–	——
24	P73	REMOCON	I	Remote control signal input

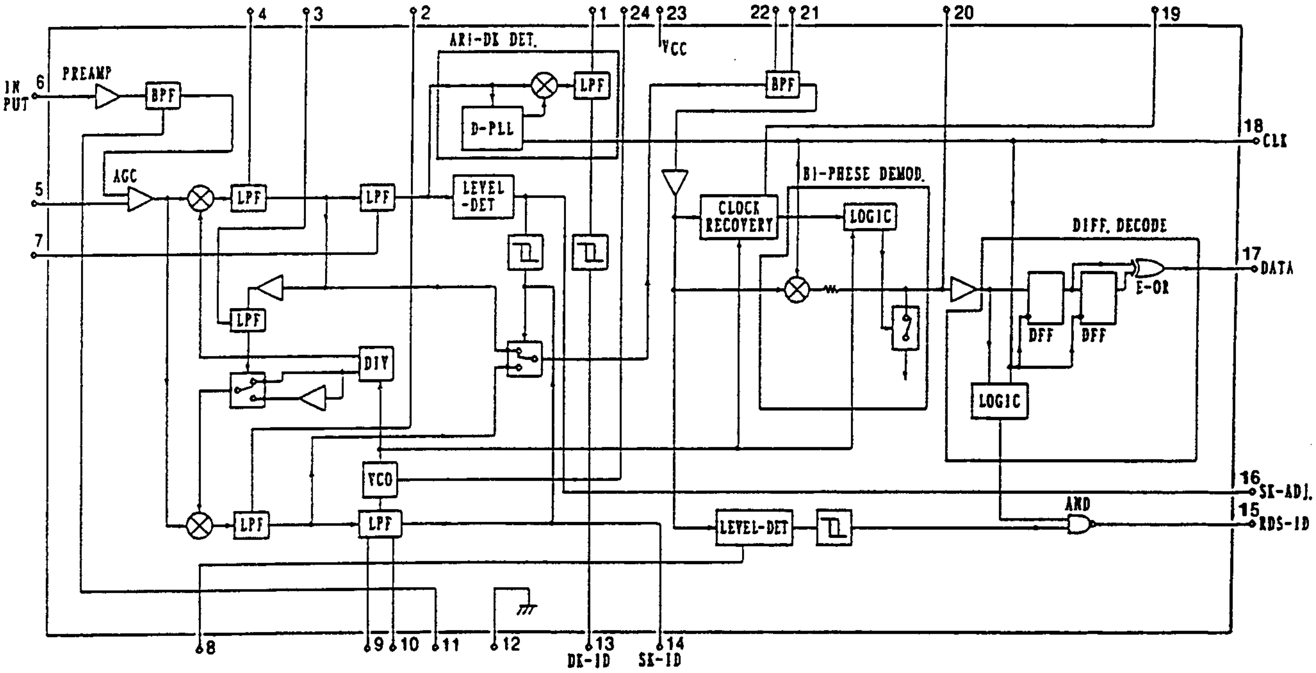
No.	Pin Name	Pin Function	I/O	Description
25 | 33	T0 | T8	G1 | G9	O	FL grid
34	T9	P2/G10	O	
35 | 39	T10 | T14	G11 | G15	O	
40	T15	P24	O	FL segment
41	VDD2	VDD2	–	+5V
42	VP	VFDP	–	−30V
43 | 50	PC0 | PC7	P23 | P16	O	FL segment
51 | 58	PD0 | PD7	P15 | P8	O	
59 | 63	PE0 | PE4	P7 | P3	O	
64	PE5	P1	O	
65 | 68	P00 | P03	LED5 | LED2	O	LED ON output
69	P04	LED1	–	
70 | 72	P05 | P07	–	–	——
73	VSS2	VSS2	–	GND
74	P10	DATA OUT	O	AF μ-COM. DATA OUT
75	P11	DATA IN	I	AF μ-COM. DATA IN
76	P12	CLK	O	AF μ-COM. communication CLK
77 | 80	P13 | P16	LED6 | LED9	O	LED ON output

■ LA2232M (IC3501 : AF ASSY) (FOR XR−P350/MEXK/EA, MEXK/EB, NBXK AND MEZIXK/DI ONLY)

● RDS Signal Demodulator

In addition to a 57 kHz band pass filter, an ARI-SK, DK signal discrimination function etc. are built in.

● Block Diagram


4
3
2
1
24
23
22
21
20
19
VCC
ARI-DK DET.
PREAMP
IN PUT
6
BPF
LPF
D-PLL
BPF
18 CLK
AGC
5
7
LPF
LPF
LEVEL -DET
BI-PHESE DEMOD.
CLOCK RECOVERY
LOGIC
DIFF. DECODE
17 DATA
E-OR
DFF
DFF
LOGIC
LPF
DIV
VCO
LPF
LPF
16 SK-ADJ.
AND
15 RDS-ID
LEVEL-DET
8
9
10
11
12
13 DK-ID
14 SK-ID

● Pin Function

No.	Pin Name	I/O	Description
1	DK filter	–	Low pass filter for DK detection
2	Q−DET	–	Low pass filter for Quadrature detection
3	NC	–	OPEN, Low pass filter for remodulation comparison
4	I−DET	–	Low pass filter for Syncronous detection
5	BYPASS	–	Band pass filter check terminal
6	RDS input	I	RDS input terminal
7	SK filter	–	Low pass filter for SK detection
8	RDS filter	–	Low pass filter for RDS detection
9	PLL loop filter	–	Remodulation comparison method PLL loop filter
10			
11	Filter adjustment	–	Band pass filter (57kHz) adjustment terminal
12	GND	–	GND
13	ARI-DK display	O	ARI-DK display terminal

No.	Pin Name	I/O	Description
14	ARI-SK display	O	ARI-SK display terminal
15	RDS display	O	RDS display terminal
16	SK sensitivity adjustment	–	SK sensitivity adjustment terminal
17	DATA	O	DATA output terminal
18	CLK	O	Clock signal output terminal
19	D−PLL	–	Low pass filter for digital PLL for clock playback
20	INTEG/D	–	Capacitor for integration damp
21	B. E. F.	–	Band pass filter for RDS detection
22			
23	Vcc	–	Vcc +5V
24	VCO	–	456 kHz ocsillation circuit

12. FOR XR−P350/MEXK/EB, MEZIXK/DI, NBXK, SD, S/DF, SL, YPW, XR−P250/MEXK/EA, MEXK/EB, MEZIXK/DI AND NBXK

12.1 CONTRAST OF MISCELLANEOUS PARTS

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

$560\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ ……………………… *RD1/8PM* $\boxed{5}\boxed{6}\boxed{1}$ *J*
$47k\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ ……………………… *RD1/4PS* $\boxed{4}\boxed{7}\boxed{3}$ *J*
$0.5\Omega \rightarrow 0R5$ …………………………………… *RN2H* $\boxed{0}\boxed{R}\boxed{5}$ *K*
$1\Omega \rightarrow 010$ …………………………………………… *RS1P* $\boxed{0}\boxed{1}\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ ……………… *RM1/4PC* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

■ LIST OF WHOLE PCB ASSEMBLIES

For XR−P350/MEXK/EB, NBXK, MEZIXK/DI, SD, SL, S/DF and YPW

Mark	Description	Part No.								Remarks
		XR−P350								
		MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
NSP	MAIN ASSY	AWK7089	AWK7089	AWK7089	AWK7090	AWK7088	AWK7088	AWK7109	AWK7110	
	├ AF ASSY	AWZ7336	AWZ7336	AWZ7336	AWZ7337	AWZ7335	AWZ7335	AWZ7335	AWZ7335	
	├ VR ASSY	AWZ7349	AWZ7349	AWZ7349	AWZ7350	AWZ7348	AWZ7348	AWZ7348	AWZ7348	
	├ SECONDARY ASSY	AWZ7362	AWZ7362	AWZ7362	AWZ7363	AWZ7361	AWZ7361	AWZ7361	AWZ7361	
	└ PRIMARY ASSY	AWZ7426	AWZ7426	AWZ7426	AWZ7427	AWZ7423	AWZ7423	AWZ7424	AWZ7425	
NSP	COMPLEX ASSY	AWM7116	AWM7116	AWM7116	AWM7117	AWM7112	AWM7115	AWM7115	AWM7115	
	├ DISPLAY ASSY	AWZ7388	AWZ7388	AWZ7388	AWZ7389	AWZ7384	AWZ7387	AWZ7387	AWZ7387	
NSP	├ H. P. ASSY	AWZ7391	AWZ7391	AWZ7391	AWZ7392	AWZ7391	AWZ7391	AWZ7391	AWZ7391	
NSP	├ MIC ASSY	AWZ7398	AWZ7398	AWZ7398	AWZ7398	AWZ7398	AWZ7398	AWZ7398	AWZ7398	
NSP	├ DECK SW ASSY	AWZ7405	AWZ7405	AWZ7405	AWZ7405	AWZ7405	AWZ7405	AWZ7405	AWZ7405	
	└ CD SW ASSY	AWZ7412	AWZ7412	AWZ7412	AWZ7412	AWZ7412	AWZ7412	AWZ7412	AWZ7412	
	TUNER MODULE	AXQ7013	AXQ7013	AXQ7013	AXQ7014	AXQ1016	AXQ1012	AXQ1012	AXQ1012	
	POWER MODULE F50	AXQ7218	AXQ7218	AXQ7218	AXQ7218	AXQ7018	AXQ7018	AXQ7018	AXQ7018	
	├ FRONT 50W ASSY	AWZ7561	AWZ7561	AWZ7561	AWZ7561	AWZ7517	AWZ7517	AWZ7517	AWZ7517	
	└ REGULATOR ASSY	AWZ7562	AWZ7562	AWZ7562	AWZ7562	AWZ7560	AWZ7560	AWZ7560	AWZ7560	
NSP	CD SLOT-IN MECHANISM	AXA7014	AXA7014	AXA7014	AXA7014	AXA7014	AXA7014	AXA7014	AXA7014	
NSP	├ SL MECHANISM BOARD ASSY	AWX7007	AWX7007	AWX7007	AWX7007	AWX7007	AWX7007	AWX7007	AWX7007	
NSP	│ ├ SENSOR BOARD ASSY	AWZ7328	AWZ7328	AWZ7328	AWZ7328	AWZ7328	AWZ7328	AWZ7328	AWZ7328	
NSP	│ ├ LED BOARD ASSY	AWZ7329	AWZ7329	AWZ7329	AWZ7329	AWZ7329	AWZ7329	AWZ7329	AWZ7329	
NSP	│ ├ SW BOARD ASSY	AWZ7330	AWZ7330	AWZ7330	AWZ7330	AWZ7330	AWZ7330	AWZ7330	AWZ7330	
NSP	│ └ MOTOR BOARD ASSY	AWZ7331	AWZ7331	AWZ7331	AWZ7331	AWZ7331	AWZ7331	AWZ7331	AWZ7331	
NSP	└ SERVO MECHANISM ASSY SL	AXA7017	AXA7017	AXA7017	AXA7017	AXA7017	AXA7017	AXA7017	AXA7017	
NSP	└ MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	

For XR−P250/MEXK/EA, MEXK/EB, NBXK and MEZIXK/DI

Mark	Description	Part No.					Remarks
		XR−P350	XR−P250				
		MEXK/EA	MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	
NSP	MAIN ASSY	AWK7089	AWK7086	AWK7086	AWK7086	AWK7087	
	├ AF ASSY	AWZ7336	AWZ7333	AWZ7333	AWZ7333	AWZ7334	
	├ VR ASSY	AWZ7349	AWZ7346	AWZ7346	AWZ7346	AWZ7347	
	├ SECONDARY ASSY	AWZ7362	AWZ7359	AWZ7359	AWZ7359	AWZ7360	
	└ PRIMARY ASSY	AWZ7426	AWZ7421	AWZ7421	AWZ7421	AWZ7422	
NSP	COMPLEX ASSY	AWM7116	AWM7113	AWM7113	AWM7113	AWM7114	
	├ DISPLAY ASSY	AWZ7388	AWZ7385	AWZ7385	AWZ7385	AWZ7386	
NSP	├ H. P. ASSY	AWZ7391	AWZ7391	AWZ7391	AWZ7391	AWZ7392	
NSP	├ MIC ASSY	AWZ7398	Not used	Not used	Not used	Not used	
NSP	├ DECK SW ASSY	AWZ7405	AWZ7405	AWZ7405	AWZ7405	AWZ7405	
	└ CD SW ASSY	AWZ7412	AWZ7412	AWZ7412	AWZ7412	AWZ7412	
	TUNER MODULE	AXQ7013	AXQ3213	AXQ3213	AXQ3213	AXQ3214	
	POWER MODULE F50	AXQ7218	AXQ7218	AXQ7218	AXQ7218	AXQ7018	
	├ FRONT 50W ASSY	AWZ7561	AWZ7561	AWZ7561	AWZ7561	AWZ7561	
	└ REGULATOR ASSY	AWZ7562	AWZ7562	AWZ7562	AWZ7562	AWZ7562	
NSP	CD SLOT-IN MECHANISM	AXA7014	AXA7014	AXA7014	AXA7014	AXA7014	
NSP	├ SL MECHANISM BOARD ASSY	AWX7007	AWX7007	AWX7007	AWX7007	AWX7007	
NSP	│ ├ SENSOR BOARD ASSY	AWZ7328	AWZ7328	AWZ7328	AWZ7328	AWZ7328	
NSP	│ ├ LED BOARD ASSY	AWZ7329	AWZ7329	AWZ7329	AWZ7329	AWZ7329	
NSP	│ ├ SW BOARD ASSY	AWZ7330	AWZ7330	AWZ7330	AWZ7330	AWZ7330	
NSP	│ └ MOTOR BOARD ASSY	AWZ7331	AWZ7331	AWZ7331	AWZ7331	AWZ7331	
NSP	└ SERVO MECHANISM ASSY SL	AXA7017	AXA7017	AXA7017	AXA7017	AXA7017	
NSP	└ MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	

■ CONTRAST OF MISCELLANEOUS PARTS

XR−P350/MEXK/EB, NBXK, MEZIXK/DI, SD, SL, S/DF, YPW, XR−P250/MEXK/EA, MEXK/EB, NBXK, MEZIXK/DI and XR−P350/MEXK/EA have the same construction except for the following:

● PACKING

Mark	No.	Description	Part No.								Remarks
			XR−P350								
			MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
	1	FM antenna assy	ADH1019	ADH1019	ADH1019	ADH1019	Not used	Not used	Not used	Not used	
	1	FM antenna	Not used	Not used	Not used	Not used	ADH1016	ADH1016	ADH1016	ADH1016	
	2	Operating instructions (French/Dutch)	ARC7024	Not used	Not used	Not used	Not used	Not used	Not used	Not used	
	2	Operating instructions (RDS) (French/Dutch)	ARC7026	Not used	Not used	Not used	Not used	Not used	Not used	Not used	
	2	Operating instructions (German/Italian)	ARC7036	Not used	Not used	ARC7036	Not used	Not used	Not used	Not used	
	2	Operating instructions (RDS) (German/Italian)	ARC7037	Not used	Not used	ARC7037	Not used	Not used	Not used	Not used	
	2	Operating instructions (English)	Not used	ARB7016	ARB7016	Not used	Not used	Not used	Not used	ARB7020	
	2	Operating instructions (RDS) (English)	Not used	ARB7017	ARB7017	Not used	Not used	Not used	Not used	Not used	
	2	Operating instructions (French/Spanish/Portuguese/ Swedish)	Not used	ARC7040	Not used	Not used	Not used	Not used	Not used	Not used	
	2	Operating instructions (RDS) (French/Spanish/Portuguese/ Swedish)	Not used	ARC7041	Not used	Not used	Not used	Not used	Not used	Not used	
	2	Operating instructions (English/Spanish/Chinese)	Not used	Not used	Not used	Not used	ARC7025	ARC7025	ARC7025	Not used	

Mark	No.	Description	Part No.								Remarks
			XR-P350								
			MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
NSP	7	Batteries (R03, AAA)	PEM1004	PEM1004	PEM1004	PEM1004	VEM-022	VEM-022	VEM-022	VEM-022	
	9	Front pad	AHA7039	AHA7039	AHA7039	AHA7039	AHA7034	AHA7034	AHA7034	AHA7034	
	10	Rear pad	AHA7040	AHA7040	AHA7040	AHA7040	AHA7035	AHA7035	AHA7035	AHA7035	
	11	Packing case	AHD7087	AHD7087	AHD7087	AHD7087	AHD7085	AHD7085	AHD7085	AHD7148	
	12	Sheet	AHG7001	AHG7001	AHG7001	AHG7001	AHG7003	AHG7003	AHG7003	AHG7003	
NSP	13	Vinyl bag	AHG1091	AHG1091	AHG1091	AHG1091	Not used	Not used	Not used	Not used	
	13	Vinyl bag	Not used	Not used	Not used	Not used	Z21-038	Z21-038	Z21-038	Z21-038	

Mark	No.	Description	Part No.					Remarks
			XR-P350	XR-P250				
			MEXK/EA	MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	
	2	Operating instructions (French/Dutch)	ARC7024	ARC7024	Not used	Not used	Not used	
	2	Operating instructions (German/Italian)	ARC7036	ARC7036	Not used	Not used	ARC7036	
	2	Operating instructions (English)	Not used	Not used	ARB7016	ARB7016	Not used	
	2	Operating instructions (French/Spanish/Portuguese/Swedish)	Not used	Not used	ARC7040	Not used	Not used	
	2	Operating instructions (RDS) (French/Dutch)	ARC7026	Not used	Not used	Not used	Not used	
	2	Operating instructions (RDS) (German/Itarian)	ARC7037	Not used	Not used	Not used	Not used	
	11	Packing case	AHD7087	AHD7086	AHD7086	AHD7086	AHD7086	

● EXTERIOR (1/3)

Mark	No.	Description	Part No.								Remarks
			XR-P350								
			MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
NSP	1	Frame L	ANG7015	ANG7015	ANG7015	ANG7015	ANG7011	ANG7011	ANG7011	ANG7011	
NSP	2	Frame R	ANG7016	ANG7016	ANG7016	ANG7016	ANG7012	ANG7012	ANG7012	ANG7012	
	5	Mic volume knob	AAB7045	AAB7045	AAB7045	AAB7045	AAB7040	AAB7040	AAB7040	AAB7040	
	6	Volume knob	AAB7046	AAB7046	AAB7046	AAB7046	AAB7039	AAB7039	AAB7039	AAB7039	
	7	STA. Lens	AAK7118	AAK7118	AAK7118	AAK7118	AAK7099	AAK7099	AAK7099	AAK7099	
	9	Bonnet case	ANE7040	ANE7040	ANE7040	ANE7040	ANE7041	ANE7041	ANE7041	ANE7041	
	10	Display panel	AAK7119	AAK7119	AAK7119	AAK7119	AAK7095	AAK7095	AAK7095	AAK7095	
	13	Deck panel L	AAN7059	AAN7059	AAN7059	AAN7059	AAN7057	AAN7057	AAN7057	AAN7057	
	14	Deck panel R	AAN7060	AAN7060	AAN7060	AAN7060	AAN7058	AAN7058	AAN7058	AAN7058	
	15	Blind mold L	AMR7029	AMR7029	AMR7029	AMR7029	AMR7027	AMR7027	AMR7027	AMR7027	
	16	Blind mold R	AMR7030	AMR7030	AMR7030	AMR7030	AMR7028	AMR7028	AMR7028	AMR7028	

Mark	No.	Description	Part No.					Remarks
			XR-P350	XR-P250				
			MEXK/EA	MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	
	5	Mic volume knob	AAB7045	Not used	Not used	Not used	Not used	
	10	Display panel	AAK7119	AAK7095	AAK7095	AAK7095	AAK7095	

● EXTERIOR (2/3)

Mark	No.	Description	Part No.								Remarks
			XR−P350								
			MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
NSP	2	Chassis	ANA7015	ANA7015	ANA7015	ANA7015	ANA7013	ANA7013	ANA7013	ANA7013	
	6	AF assy	AWZ7336	AWZ7336	AWZ7336	AWZ7337	AWZ7335	AWZ7335	AWZ7335	AWZ7335	
	7	VR assy	AWZ7349	AWZ7349	AWZ7349	AWZ7350	AWZ7348	AWZ7348	AWZ7348	AWZ7348	
	8	Rear panel	ANC7161	ANC7161	ANC7162	ANC7163	ANC7133	ANC7133	ANC7155	ANC7154	
	9	Power module F50	AXQ7218	AXQ7218	AXQ7218	AXQ7218	AXQ7018	AXQ7018	AXQ7018	AXQ7018	
⚠	11	Power transformer (T1) (AC220−230V)	ATS7032	ATS7032	ATS7032	ATS7032	Not used	Not used	Not used	Not used	
⚠	11	Power transformer (T1) (AC110−115V/120−127V/ 220−230V/240V)	Not used	Not used	Not used	Not used	ATS7033	ATS7033	ATS7033	ATS7033	
⚠	13	Fuse (T1A, FU1)	REK−100	REK−100	REK−100	REK−100	Not used	Not used	Not used	REK−100	
	14	PRIMARY assy	AWZ7426	AWZ7426	AWZ7426	AWZ7427	AWZ7423	AWZ7423	AWZ7424	AWZ7425	
	15	SECONDARY assy	AWZ7362	AWZ7362	AWZ7362	AWZ7363	AWZ7361	AWZ7361	AWZ7361	AWZ7361	∗4
	16	Strain relief	CM−22B	CM−22B	CM−22B	CM−22B	AEC−882	AEC−882	AEC−882	AEC−882	
⚠	17	AC power cord	ADG1138	ADG1138	ADG1148	ADG1138	PDG1013	PDG1013	PDG1003	ADG1123	
⚠		Fuse (5A)	Not used	Not used	AEK1046	Not used	Not used	Not used	Not used	Not used	∗6
	18	Tuner module	AXQ7013	AXQ7013	AXQ7013	AXQ7014	AXQ1016	AXQ1012	AXQ1012	AXQ1012	
⚠		Voltage selector (S1)	Not used	Not used	Not used	Not used	AKX−507	AKX−507	AKX−507	Not used	∗1
⚠		Fuse (T1A, FU2, FU3)	Not used	Not used	Not used	Not used	REK−100	REK−100	REK−100	Not used	∗2
⚠		Ceramic capacitor	Not used	Not used	Not used	CKCYB102K50	Not used	Not used	Not used	Not used	∗3

Mark	No.	Description	Part No.					Remarks
			XR−P350	XR−P250				
			MEXK/EA	MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	
	6	AF assy	AWZ7336	AWZ7333	AWZ7333	AWZ7333	AWZ7334	
	7	VR assy	AWZ7349	AWZ7346	AWZ7346	AWZ7346	AWZ7347	
	8	Rear panel	ANC7161	ANC7158	ANC7158	ANC7159	ANC7160	
	14	PRIMARY assy	AWZ7426	AWZ7421	AWZ7421	AWZ7421	AWZ7422	
	15	SECONDARY assy	AWZ7362	AWZ7359	AWZ7359	AWZ7359	AWZ7360	∗5
⚠	17	AC power cord	ADG1138	ADG1138	ADG1138	ADG1148	ADG1138	
⚠		Fuse (5A)	Not used	Not used	Not used	AEK1046	Not used	∗6
	18	Tuner module	AXQ7013	AXQ3213	AXQ3213	AXQ3213	AXQ3214	
⚠		Ceramic capacitor	Not used	Not used	Not used	Not used	CKCYB102K50	∗3

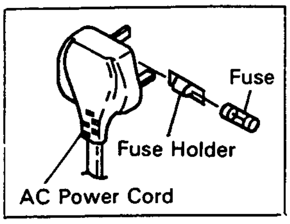
Notes)

∗1−∗3: Refer to Page 12.

∗4: Although AWZ7363, AWZ7361 and AWZ7362 are different in part number, they consist of the same component.

∗5: Although AWZ7359, AWZ7360 and AWZ7362 are different in part number, they consist of the same component.

∗6: NBXK Only



● EXTERIOR (3/3)

Mark	No.	Description	Part No.								Remarks
			XR−P350								
			MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	S/DF	SD	SL	YPW	
	1	Front panel	AMB7188	AMB7188	AMB7188	AMB7188	AMB7185	AMB7185	AMB7185	AMB7185	
	3	STA. lens	AAK7118	AAK7118	AAK7118	AAK7118	AAK7099	AAK7099	AAK7099	AAK7099	
	12	DISPLAY assy	AWZ7388	AWZ7388	AWZ7388	AWZ7389	AWZ7384	AWZ7387	AWZ7387	AWZ7387	
	20	H. P. assy	AWZ7391	AWZ7391	AWZ7391	AWZ7392	AWZ7391	AWZ7391	AWZ7391	AWZ7391	
	21	Door pocket L	AAN7051	AAN7051	AAN7051	AAN7051	AAN7041	AAN7041	AAN7041	AAN7041	
	23	Door spring L	ABH7032	ABH7032	ABH7032	ABH7032	ABH7040	ABH7040	ABH7040	ABH7040	
	24	Door pocket R	AAN7052	AAN7052	AAN7052	AAN7052	AAN7042	AAN7042	AAN7042	AAN7042	
	26	Door spring R	ABH7033	ABH7033	ABH7033	ABH7033	ABH7041	ABH7041	ABH7041	ABH7041	
	28	Eject arm L	AMR7024	AMR7024	AMR7024	AMR7024	AMR7020	AMR7020	AMR7020	AMR7020	
	30	Spring L	ABH7028	ABH7028	ABH7028	ABH7028	RBH1411	RBH1411	RBH1411	RBH1411	
	31	Eject arm R	AMR7025	AMR7025	AMR7025	AMR7025	AMR7021	AMR7021	AMR7021	AMR7021	
	33	Spring R	ABH7029	ABH7029	ABH7029	ABH7029	RBH1412	RBH1412	RBH1412	RBH1412	
	34	Shield	ANK7007	ANK7007	ANK7007	ANK7007	ANK7006	ANK7006	ANK7006	ANK7006	
	37	Connector assy 5P	ADX7045	ADX7045	ADX7045	ADX7045	RKP1582	RKP1582	RKP1582	RKP1582	
	38	Connector assy 3P	ADX7046	ADX7046	ADX7046	ADX7046	RKP1583	RKP1583	RKP1583	RKP1583	
	39	Coupling mold	AMR7026	AMR7026	AMR7026	AMR7026	AMR7019	AMR7019	AMR7019	AMR7019	

Mark	No.	Description	Part No.					Remarks
			XR−P350	XR−P250				
			MEXK/EA	MEXK/EA	MEXK/EB	NBXK	MEZIXK/DI	
	1	Front panel	AMB7188	AMB7187	AMB7187	AMB7187	AMB7187	
	8	Power button	AAD7119	AAD7155	AAD7155	AAD7155	AAD7155	
	12	DISPLAY assy	AWZ7388	AWZ7385	AWZ7385	AWZ7385	AWZ7386	
NSP	18	MIC assy	AWZ7398	Not used	Not used	Not used	Not used	
	19	Mic holder	AMR7022	Not used	Not used	Not used	Not used	
NSP	20	H.P. assy	AWZ7391	AWZ7391	AWZ7391	AWZ7391	AWZ7392	

● POWER MODULE F50

AXQ7018 and AXQ7218 have the same construction except for the following:

Mark	No.	Description	Part No.		Remarks
			AXQ7218	AXQ7018	
	1	Front 50W assy	AWZ7561	AWZ7517	∗1
	2	Regulator assy	AWZ7562	AWZ7560	
	3	Heat sink	ANH7009	ANH7007	
	6	Mold A	AMR7005	AMR2594	
	7	Mold B	AMR7006	AMR2595	
	11	DC fan motor	AXM7003	AXM1019	

Note ∗1: Although AWZ7517 and AWZ7561 are different in part number, they have the same service parts.

■ CONTRAST OF PCB ASSEMBLIES

AF ASSY

AWZ7337, AWZ7335, AWZ7333, AWZ7334 and AWZ7336 have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		AWZ7336	AWZ7337	AWZ7335	AWZ7333	AWZ7334	
	IC3501	LM2232M	LM2232M	Not used	Not used	Not used	
	IC4101, IC4301, IC8401	NJM4558M-D	NJM4558M-D	NJM4558MD	NJM4558M-D	NJM4558M-D	
	Q3501	2SA1048	2SA1048	Not used	Not used	Not used	
	Q3502	DTC143ES	DTC143ES	Not used	Not used	Not used	
	Q3503	2SC2458	2SC2458	Not used	Not used	Not used	
	Q1040	2SA1515	2SA1515	Not used	2SA1515	2SA1515	
	Q1041	DTC143ES	DTC143ES	Not used	DTC143ES	DTC143ES	
	D1023	MTZJ33B/C	MTZJ33B/C	MTZJ33B	MTZJ33B/C	MTZJ33B/C	
	L1301-L1304	Not used	ATH-133	Not used	Not used	ATH-133	
	C1305, C1306	Not used	CQMXA103J100	Not used	Not used	CQMXA103J100	
	C1307-C1310	Not used	CKSQYF104Z50	Not used	Not used	CKSQYF104Z50	
	C2103, C2104	Not used	CCSQSL221J50	Not used	Not used	CCSQSL221J50	
	C3501, C3507	CKSQYF103Z50	CKSQYF103Z50	Not used	Not used	Not used	
	C3503, C3510, C3512	CEAS4R7M50	CEAS4R7M50	Not used	Not used	Not used	
	C3504	CEAS220M50	CEAS220M50	Not used	Not used	Not used	
	C3505, C3506	CKSQYB332K50	CKSQYB332K50	Not used	Not used	Not used	
	C3508	CCSQCH271J50	CCSQCH271J50	Not used	Not used	Not used	
	C3509, C3511	CEAS100M50	CEAS100M50	Not used	Not used	Not used	
	C3513	CKSQYF223Z50	CKSQYF223Z50	Not used	Not used	Not used	
	C3514, C3515	CKSQYF333Z50	CKSQYF333Z50	Not used	Not used	Not used	
	C3516	CKSQYB682K50	CKSQYB682K50	Not used	Not used	Not used	
	C4191, C4192	CCSQCH470J50	CCSQCH470J50	Not used	CCSQCH470J50	CCSQCH470J50	
	VR3501 (4.7k)	PCP1028	PCP1028	Not used	Not used	Not used	
	R1040	RS1/10S103J	RS1/10S103J	Not used	RS1/10S103J	RS1/10S103J	
	R1041	RS1/6PM222J	RS1/6PM222J	Not used	RS1/6PM222J	RS1/6PM222J	
	R1103, R1109, R1171, R3507, R3509, R3551	RS1/10S102J	RS1/10S102J	Not used	Not used	Not used	
	R1112	Not used	Not used	RS1/10S563J	RS1/10S563J	RS1/10S563J	
	R1305, R1306	Not used	RS1/10S100J	Not used	Not used	RS1/10S100J	
	R1307, R1308	Not used	RD1/2PMFL101J	Not used	Not used	RS1/2PMFL101J	
	R3501	RS1/10S473J	RS1/10S473J	Not used	Not used	Not used	
	R3502	RS1/6PM102J	RS1/6PM102J	Not used	Not used	Not used	
	R3504	RS1/10S101J	RS1/10S101J	Not used	Not used	Not used	
	R3505	RS1/10S221J	RS1/10S221J	Not used	Not used	Not used	
	R3506	RS1/10S472J	RS1/10S472J	Not used	Not used	Not used	
	R3508	RS1/10S564J	RS1/10S564J	Not used	Not used	Not used	
	R3510	RS1/10S562J	RS1/10S562J	Not used	Not used	Not used	
	R3511	RS1/10S332J	RS1/10S332J	Not used	Not used	Not used	
	R3512, R3514	RS1/10S103J	RS1/10S103J	Not used	Not used	Not used	
	R3513	RS1/10S223J	RS1/10S223J	Not used	Not used	Not used	
	R3520	RS1/6PM563J	RS1/6PM563J	Not used	Not used	Not used	
	R3552	RS1/10S000J	RS1/10S000J	Not used	Not used	Not used	
	X3501 (456kHz)	ASS7001	ASS7001	Not used	Not used	Not used	
	CN2102 Pin jack (2P)	AKB1164	AKB1171	AKB1164	Not used	Not used	
	CN7 CONNECTOR 4P	KPE4	KPE4	KPE4	Not used	Not used	

VR ASSY

AWZ7350, AWZ7348, AWZ7346, AWZ7347 and AWZ7349 have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		AWZ7349	AWZ7350	AWZ7348	AWZ7346	AWZ7347	
	IC1501	NJM4558M-D	NJM4558M-D	NJM4558MD	NJM4558M-D	NJM4558M-D	
	C1507, C1508	Not used	CCSQSL470J50	Not used	Not used	CCSQSL470J50	
	C1555, C1556	CCSQSL221J50	CCSQSL221J50	Not used	CCSQSL221J50	CCSQSL221J50	
	R1505, R1506	RS1/10S474J	RS1/10S474J	RS1/10S104J	RS1/10S474J	RS1/10S474J	

PRIMARY ASSY

AWZ7427, AWZ7423, AWZ7424, AWZ7425, AWZ7421, AWZ7422 and AWZ7426 have the same construction except for the following :

Mark	Symbol & Description	Part No.							Remarks
		AWZ7426	AWZ7427	AWZ7423	AWZ7424	AWZ7425	AWZ7421	AWZ7422	
	C102	Not used	ACG1003	Not used	Not used	Not used	Not used	ACG1003	
	L101	Not used	ATF-151	Not used	Not used	Not used	Not used	ATF-151	
NSP⚠	H1101-H1104 Fuse clip	Not used	Not used	AKR1003	AKR1003	Not used	Not used	Not used	
NSP⚠	H1105, H1106 Fuse clip	AKR1003	AKR1003	Not used	Not used	AKR1003	AKR1003	AKR1003	
NSP⚠	Board in clip	Not used	Not used	ADX1980	ADX1980	Not used	Not used	Not used	

SECONDARY ASSY

Although AWZ7363, AWZ7361, AWZ7360, AWZ7359 and AWZ7362 are different in part number, they consist of the same components.

DISPLAY ASSY

AWZ7389, AWZ7387, AWZ7384, AWZ7385, AWZ7386 and AWZ7388 have the same construction except for the following :

Mark	Symbol & Description	Part No.						Remarks
		AWZ7388	AWZ7389	AWZ7387	AWZ7384	AWZ7385	AWZ7386	
	D1801	1SS254	1SS254	1SS254	1SS254	Not used	Not used	
	D1810, D1819	1SS254	1SS254	Not used	Not used	Not used	Not used	
	D1812, D1817	Not used	Not used	1SS254	Not used	Not used	Not used	
	D1811, D1818	Not used	Not used	Not used	1SS254	Not used	Not used	

H. P. ASSY

AWZ7392 and AWZ7391 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7391	AWZ7392	
	C1201, C1202	Not used	CCSQCH101J50	

REGULATOR ASSY

AWZ7560 and AWZ7562 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7562	AWZ7560	
	C7697	CKCYB103K50	CKDYB103K50	

TUNER MODULE (AXQ3213 and AXQ1012))

AXQ3213, AXQ1012 and AXQ7013 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AXQ7013	AXQ3213	AXQ1012	
	C6202 (1μF/16V)	Not used	Not used	ACG1051	
	C6230	CKSQYB273K50	CKSQYB273K50	CKSQYB333K50	
	C6232	CKSYB273K50	CKSYB273K50	CKSYB333K50	
	C6251	CKSYB822K50	CKSYB822K50	CKSYB472K50	
	C6252	CKSQYB822K50	CKSQYB822K50	CKSQYB472K50	
	C6268	Not used	Not used	CCSQCH101J50	
	C6269	CCSQCH101J50	CCSQCH101J50	Not used	
	C6270 (1μF/16V)	ACG1051	ACG1051	Not used	
	R6274, R6277	RS1/10S000J	Not used	Not used	
	R6288	RS1/10S000J	RS1/10S000J	RS1/10S471J	
	BN6201 Terminal 4P	Not used	Not used	AKA1016	
	BN6201 Terminal 2P with PAL	AKA1017	AKA1017	Not used	

Note: For schematic and PCB diagram, refer to page 34.

TUNER MODULE (AXQ3214)

AXQ3214 and AXQ7014 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AXQ7014	AXQ3214	
	R6274, R6277	RS1/10S000J	Not used	

Notes:

- *For AXQ7014, refer to "■ PCB PARTS LIST".*
- *For schematic and PCB diagram, refer to page 37.*

PCB PARTS LIST

TUNER MODULE (AXQ7014)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202, Q6218		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104, Q6105		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101−D6104		1SV228

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L6106		ATC1003
	L6105		ATC1015
	L6101		ATC1016
	L6102		ATC1017
	L6103		ATC1018
	L6104		ATC1019
	L6207	(10.7MHZ)	ATE1013
	F6204		ATF−107
	F6203		ATF−119
	F6205		ATF1152
	F6202	(450KHZ)	ATF1155
	L6107	(2.2UH)	ATH1043
	L6202, L6203, L6208		LCTA2R2J3225
	L6205		LCTA680J3225

CAPACITORS

Mark	No.	Description	Parts No.
	C6204, C6234, C6236, C6269	(1μF/16V)	ACG1051
	C6120		CCSCH060D50
	C6229		CCSCH102J50
	C6111, C6122		CCSQCH010C50
	C6112		CCSQCH020C50
	C6118		CCSQCH080D50
	C6113		CCSQCH101J50
	C6116, C6208, C6221, C6222		CCSQCH150J50
	C6117		CCSQCH330J50
	C6272		CCSQSL390J50
	C6105		CCSQSL471J50
	C6101		CCSQTH110J50
	C6119		CCSQTH150J50
	C6109		CCSQTH270J50
	C6107, C6110		CCSQTH300J50
	C6106		CCSQTH330J50
	C6261		CEAS010M50
	C6224, C6231, C6233, C6246, C6262		CEAS100M50
	C6216, C6217		CEAS330M16
	C6219		CEAS470M10
	C6243−C6245		CEAS470M16
	C6227		CEAS470M25
	C6238, C6248		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6115, C6125, C6126, C6207		CKSQYB102K50
	C6102, C6114, C6121, C6124, C6210		CKSQYB103K50
	C6264		CKSQYB103K50
	C6247		CKSQYB122K50
	C6213		CKSQYB223K50
	C6230		CKSQYB273K50
	C6228		CKSQYB472K50
	C6209, C6237, C6267		CKSQYB473K50
	C6251, C6252		CKSQYB562K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242		CKSQYF223Z50
	C6255, C6256		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225, C6241		CKSQYF473Z50
	C6123		CKSYB103K50
	C6232		CKSYB273K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR6201	(10K)	ACP1056
	VR6202		VRTB6VS223
	R6299, R6300		RD1/6PM102J
	R6115, R6119, R6123, R6127, R6129		RS1/8S000J
	R6268−R6271, R6275, R6276, R6278		RS1/8S000J
	R6283, R6284, R6293, R6294, R6297		RS1/8S000J
	R6302, R6303		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211, R6239		RS1/8S103J
	R6237		RS1/8S122J
	R6209		RS1/8S221J
	R6112		RS1/8S473J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	X6203	(7.200MHZ)	ASS1042
	X6201	(456KHZ)	ASS1066
	X6202	(450KHZ)	ATF1027
	BN6201	2P ANTENNA TERMINAL WITH PAL	AKA1017
		AM RF TUNING BLOCK	AXX1041

TUNER MODULE (AXQ1016)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6101		LA1836M
	IC6102		LM7001J
	IC6103		MC13020M
	Q6117		2SA1162
	Q6102		2SC2223
	Q6113		2SC2235
	Q6110, Q6115, Q6116, Q6121−Q6124		2SC2712
	Q6103, Q6107, Q6119, Q6120		2SC2714
	Q6111		2SK208
	Q6104, Q6105		2SK302
	Q6101		3SK194
	Q6106, Q6109		XDA124EK
	Q6112, Q6118		XDC124EK
	Q6108, Q6114		XDC143EK
	D6106		1SS181
	D6101, D6102, D6104		1SV228

COILS AND FILTERS

Mark	No.	Description	Parts No.
	T6102		ATB1010
	L6106		ATC1008
	L6101		ATC1025
	L6102		ATC1026
	L6103		ATC1027

Mark	No.	Description	Parts No.
	L6104		ATC1028
	T6101		ATE−063
	L6109		ATE1013
	F6102		ATF−107
	F6101		ATF−119
	F6103		ATF1144
	L6107		ATH1043
	L6108, L6110		LCTA2R2J3225

CAPACITORS

Mark	No.	Description	Parts No.
	C6191−C6194		ACG1050
	C6129, C6153, C6154, C6199, C6200 (1μF/16V)		ACG1051
	C6120		CCSCH150J50
	C6111		CCSQCH010C50
	C6112, C6122		CCSQCH020C50
	C6113		CCSQCH101J50
	C6157, C6177		CCSQCH102J50
	C6141, C6142		CCSQCH150J50
	C6183		CCSQCH470J50
	C6119		CCSQUJ060D50
	C6118		CCSQUJ080D50
	C6101, C6116		CCSQUJ150J50
	C6106		CCSQUJ270J50
	C6107, C6117		CCSQUJ330J50
	C6185, C6186		CEANLR47M50
	C6165, C6166, C6190		CEAS010M50
	C6137, C6145, C6169, C6205		CEAS100M50
	C6164, C6197, C6198		CEAS101M25
	C6179, C6188		CEAS2R2M50
	C6206		CEAS330M16
	C6140, C6155, C6162, C6163, C6178		CEAS470M25
	C6187		CEAS470M25
	C6189		CEAS4R7M50
	C6160, C6161, C6176		CEJA100M16
	C6181		CEJA470M16
	C6135		CFTXA103J50
	C6134		CFTXA394J50
	C6132		CKCYX473M16
	C6105, C6115, C6125, C6126, C6128		CKSQYB102K50
	C6167, C6168		CKSQYB102K50
	C6102, C6103, C6114, C6121, C6124		CKSQYB103K50
	C6136, C6139, C6144, C6170, C6172		CKSQYB103K50
	C6182, C6184		CKSQYB103K50
	C6195, C6196		CKSQYB222K50
	C6131, C6143		CKSQYB223K50
	C6173−C6175, C6180		CKSQYB332K50
	C6158, C6159		CKSQYB333K50
	C6156		CKSQYB472K50
	C6201		CKSQYF104Z50
	C6152		CKSQYF224Z25
	C6138, C6146−C6150, C6171		CKSQYF473Z50
	C6123		CKSYB103K50
	C6207		CKSYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR6101 (10k)		ACP1043
	VR6102 (22k)		ACP1044
	R6115, R6119, R6123, R6127		RS1/8S000J
	R6217, R6218		RS1/8S000J
	R6137		RS1/8S331J
	R6112		RS1/8S473J
	R6141		RS1/8S563J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	BN6101	TERMINAL 4−P	AKA1016
	X6102	CRYSTAL RESONATOR	ASS1042
	X6101	CRYSTAL RESONATOR	ASS1066
	X6104	CERAMIC RESONATOR	ASS1086
	X6103	CERAMIC RESONATOR	ATF1027
		AM RF TUNING BLOCK	AXX1044

PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRV1275

SPEAKER SYSTEM
S-P350 XE

- **This product is component of systems.
For the instruction manual,refer to the service manual RRV1222 for XR–P350.**

FOR PRECAUTION OF REASSEMBLY AND DISASSEMBLY

- The grille is attached to the cabinet by catches. Detach by pulling it toward you.
- The woofer is attached to the baffle by 4 external screws. To detach it, first remove the cosmetic baffle. Then remove the woofer. When attaching it, face its terminal downward.
- The midrange is attached to the baffle by 2 external screws. To detach it, first remove the cosmetic baffle. Then remove the midrange. When attaching it, face its terminal downward.
- The tweeter is attached to the baffle. To detach it, first remove the cosmetic baffle. Then detach by pulling it toward you.
- The cosmetic baffle is attached to the baffle by its bosses. To detach it, first detach the grille. Then pry it open by inserting a flat blade screwdriver into its lower-side slot. To attach it, apply adhesive to the holes on the baffle. Then press it to the baffle with the gasket.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

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PARTS LIST

NOTES:

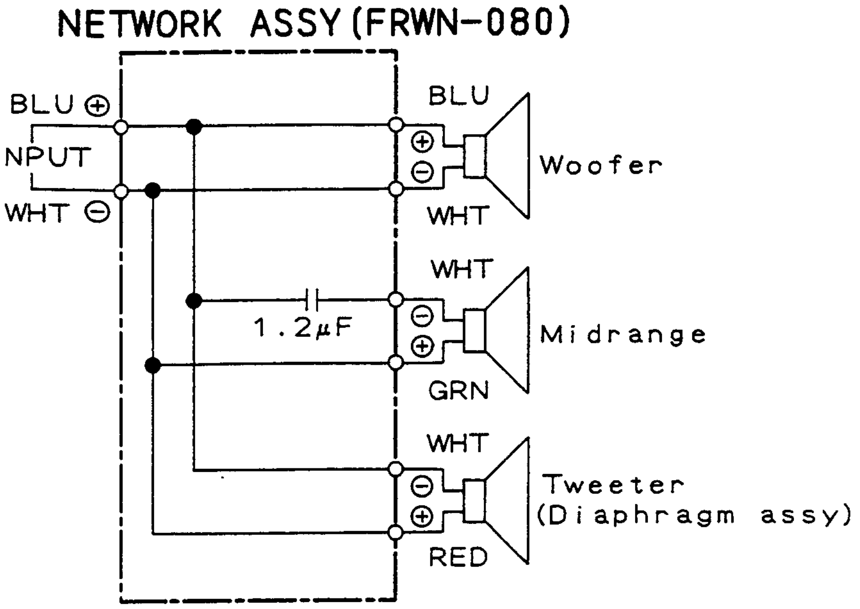
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Mark	No.	Description	Parts No.
		Grille L	FRMG−074
		Grille R	FRMG−075
		Network assy	FRWN−080
		Input terminal	FRKX−004
		Cosmetic baffle L	FRNK−115
		Cosmetic baffle R	FRNK−116
		Diaphragm assy (Tweeter)	SXE1059
		Speaker (Woofer)	P13EC70−56F
		Speaker (Midrange)	D66AP45−76F
		Screw (for speaker)	BPZ40P160FZB

For Packing

Mark	No.	Description	Parts No.
		Speaker cord	FRDD−015
		Protector	FRHA−071
		Protection mat S4	FRHC−018
		Packing case	FRHG−130

SCHEMATIC DIAGRAM


NETWORK ASSY (FRWN-080)
BLU ⊕
INPUT
WHT ⊖
BLU
⊕
⊖
Woofer
WHT
WHT
1.2μF
⊖
⊕
Midrange
GRN
WHT
⊖
⊕
Tweeter
(Diaphragm assy)
RED